





BIOGRAPHICAL DIRECTORY

OF THE

AMERICAN IRON AND STEEL INSTITUTE

PREPARED UNDER THE DIRECTION OF
JAMES T. McCLEARY, Secretary



Published by the
AMERICAN IRON AND STEEL INSTITUTE
30 Church Street, New York
1911

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No 2

FOREWORD

One of the objects of the Institute is to promote acquaintanceship, and therefore friendship, among its members. As one means to that end this book has been prepared. It is intended for circulation among the members of the Institute only, except that copies will be sent to a number of the leading iron and steel producers of Europe.

These biographies are in no sense intended as eulogies, tempting as that field would be in dealing with the records of very many of the members; they are simply statements of fact intended to serve as introductions of the members to each other.

The biographical sketches have been prepared in the office of the Secretary of the Institute from data obtained from different sources, always the best available. They may be accepted as reliable.

The first edition of the Directory does not completely cover the membership of the Institute. Some of the members have been abroad during the time of its preparation and are, therefore, not represented at all; and, for various reasons, other members have had to be omitted or only partially represented. These facts have necessitated a slight modification of the original plan, which contemplated a full page for each member. Incomplete sketches are placed at the end of the book out of their alphabetical order, but they may be found by means of the index.

The loyal co-operation of the Assistant Secretary of the Institute, Mr. Howard H. Cook, in the preparation of this Directory is gratefully acknowledged.

JAMES T. McCLEARY,

Secretary.

New York City, June 15, 1911.



American Iron and Steel Institute

Officers

1911-1912

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| POWELL STACKHOUSE | First Vice-President |
| WILLIS L. KING | Second Vice-President |
| CHARLES M. SCHWAB | Third Vice-President |
| EDWARD BAILEY | Treasurer |
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JESSE F. WELBORN

Term expires in 1913

EDWARD BAILEY
EDMUND A. S. CLARKE
WILLIS L. KING
SAMUEL MATHER
JOHN A. TOPPING

Term expires in 1914

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EDGAR C. FELTON
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OFFICERS AND DIRECTORS





ELBERT HENRY GARY

CHAIRMAN,

UNITED STATES STEEL CORPORATION

BORN in Wheaton, Ill., October 8, 1846, son of Erastus and Susan A. (Vallette) Gary. Educated in the public schools of Wheaton, Ill., Wheaton College and Chicago University, Law Department, LL.B., 1867. Honorary Degree, LL.D., 1906, McKendree College.

Admitted to the bar in Illinois in 1867, Supreme Court of the United States in 1878. Practised law in Chicago and was General Counsel for many large corporations. President of the Chicago Bar Association, 1893-94. Took a leading part in the organization of the Consolidated Steel and Wire Co., 1890; American Steel and Wire Co., 1898; Federal Steel Co., 1898. Retired from the practice of law in October, 1898, to become President of the Federal Steel Co. Prominent in the formation of the United States Steel Corporation of which he is Chairman of the Board of Directors and of the Finance Committee. Director of a large number of subsidiary companies of the United States Steel Corporation. Also Chairman of the Board of Directors and of the Finance Committee of the Allis-Chalmers Co.; Director, International Harvester Co.; Hudson & Manhattan R. R. Co.; and of a large number of banks.

Trustee of Northwestern University. Built the Gary Memorial Church, Wheaton, Ill.; presented law library to Northwestern University; built Y. M. C. A., Gary, Ind.

Member, Metropolitan, Lawyers and New York Yacht Clubs, New York; Union League Club, Chicago; Past President of Illinois Society of New York; etc., etc.

Business address: 71 Broadway, New York.

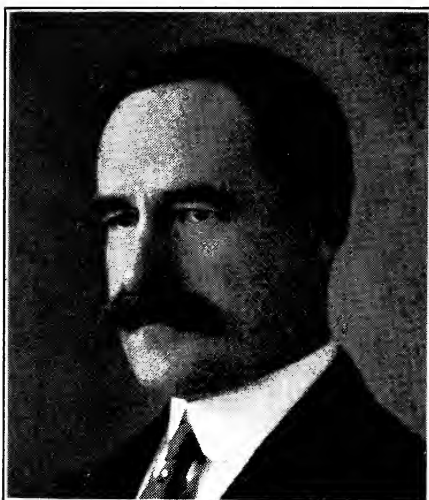
Home address: Waldorf-Astoria, New York.

EDWARD BAILEY

PRESIDENT,
CENTRAL IRON AND STEEL COMPANY

BORN in Harrisburg, Pa., October 19, 1861, son of Charles Lukens and Emma H. (Doll) Bailey. Educated at Phillips Academy, Andover, Mass., and graduate of Yale University, Sheffield Scientific School, Ph. B., 1881. Took a post graduate course in chemistry.

Entered the iron business in 1882, in the employ of Charles L. Bailey & Co., Inc., manufacturers of nails and



puddlebars. On the death of C. L. Bailey in 1899, was elected President of the Central Iron and Steel Co. Elected President of Harrisburg National Bank in 1892; organized Harrisburg Trust Co. in 1893. President since that time. President of the Pennsylvania Surety Co., the Harrisburg Traction Co. Chairman,

Central Penna. Traction Co. Director, American Iron & Steel Mfg. Co., Steelton National Bank, Steelton Trust Co., New Cumberland National Bank, Halifax National Bank, Farmers Trust Co. (Carlisle), East End Bank (Harrisburg), Harrisburg Shoe Mfg. Co., etc., etc.

Member, University Club, New York, and University Club, Phila. Trustee of Pennsylvania Insane Hospital, and Home for the Friendless, Harrisburg.

Business address: Harrisburg, Pa.

Home address: 1517 North Front St., Harrisburg, Pa.

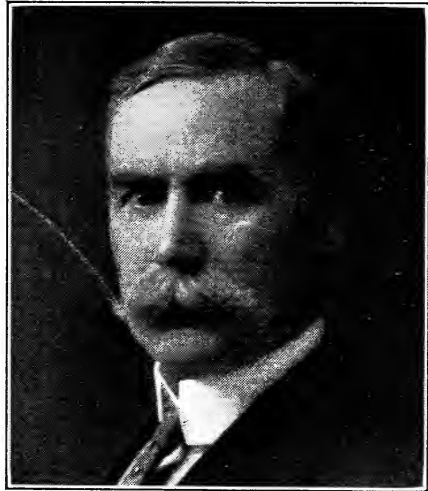
JAMES ANSON CAMPBELL

PRESIDENT,

THE YOUNGSTOWN SHEET AND TUBE COMPANY

BORN in Ohlton, Trumbull Co., Ohio, September 11, 1854, son of John and Caroline (Jones) Campbell. Educated in the public schools of Niles and Girard, Ohio, and at Hiram College, Hiram, Ohio.

During the period 1881-1891, was General Manager and Treasurer of the Youngstown Ice Co.; 1891-1894, Superintendent of the Warren Mill, for The Trumbull Iron Co.; 1894-1897, with the Union Iron & Steel Co., as Superintendent of the Pomeroy Mill; 1897-1899, General Superintendent of the Mahoning Valley Iron Co.; 1899-1900, Manager of the Youngstown District for the Republic Iron and Steel Co.; 1901-1903, Vice-President and General Manager of the Youngstown Sheet & Tube Co.



Elected President of the last named company in 1903. Also President and Director Crete Mining Co., The Crystal Ice and Storage Co., The Central Store Co.; Vice-President and Director, The Youngstown Ice Co.; Director, Lackawanna Steel Co. and several banks.

Trustee, Hiram College and Youngstown Chamber of Commerce. Member, Duquesne Club, Pittsburgh; Youngstown Club and Mahoning Golf Club, Youngstown.

Business address: Youngstown, Ohio.

Home address: 722 Bryson St., Youngstown, Ohio.

EDMUND ARTHUR STANLEY CLARKE

PRESIDENT,

LACKAWANNA STEEL COMPANY

BORN in Ottawa, Canada, January 21, 1862, son of Thomas Curtis and Susan Harriet (Smith) Clarke. Graduate of Harvard Univ., A. B., (cum laude), 1884.

In 1884, entered laboratory of Spang Steel & Iron Co., Sharpsburg, Pa.; 1885, with Union Steel Co., Chicago, and in 1890, became Asst. Superintendent, Union Works, Illinois Steel Co.; in 1891, appointed Asst.



General Superintendent, South Works, and in 1899, General Manager, Illinois Steel Co. Resigned November 1, 1899, and went abroad. March 1, 1900, became General Manager of Manufacturing, Deering Harvester Co., and October 1, 1903, was appointed to the same position in the International Harvester Co. Resigned

December 15, 1904, to become President, Lackawanna Steel Co. Officer and Director in many companies.

Member, Amer. Inst. Mining Engineers, Amer. Soc. Testing Materials, Int. Assn. Testing Materials, etc. Member, Century, Harvard, Metropolitan, Railroad Clubs, New York; Chicago Club, Chicago; Buffalo, Harvard Clubs, Buffalo; A. D., Harvard Union, Harvard Varsity Clubs; Delta Kappa Epsilon and Zeta Psi.

Business address: 2 Rector St., New York.

Home address: 10 East 75th St., New York.

THOMAS J. DRUMMOND

PRESIDENT,

LAKE SUPERIOR CORPORATION

BORN in the County of Leitrim, Ireland, September 26, 1860, son of George and Elizabeth Morris (Soden) Drummond. Educated in the public schools of Montreal.

Partner in the firm of Drummond, McCall and Company, of Montreal, iron and steel merchants. This well known firm was established in 1881, by George E. Drummond and James T. McCall and founded the Montreal Car Wheel Company, the Canadian Iron Furnace Company of Montreal and Radnor Forges, Quebec, and the Drummond-McCall Pipe Foundry Company. President of the Lake Superior Corporation, the Algoma Steel Company, the Algoma Central Railway and the Canada Iron Corporation. Director of the Royal Bank of Canada. President of the Montreal Board of Trade in 1908 and 1909. Governor of the Montreal General Hospital and the Western Hospital, Montreal.



Member of the Mount Royal Club, the St. James Club, Canada Club, Forest and Stream Club and Hunt Club of Montreal, Canada; York Club, and Toronto Club, Toronto, Canada.

Business address: 28 Victoria Square, Montreal.

Home address: 512 Sherbrooke St., Montreal.

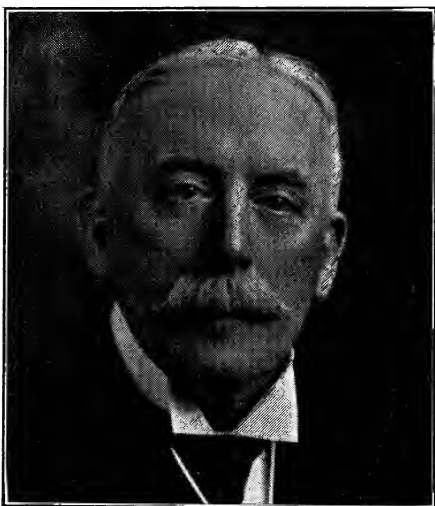
JAMES A. FARRELL

PRESIDENT,

UNITED STATES STEEL CORPORATION

BORN in New Haven, Conn., February 15, 1863, son of John G. and Catherine Farrell. Educated in the public schools of New Haven, Conn.

During the period 1878 to 1894, was employed in various capacities in the manufacturing branch of the iron and steel industry. Was soon after appointed General Manager of the Pittsburgh Wire Company



which had a plant at Braddock, Pa., and produced rods, wire products and wire nails. This plant was subsequently acquired by the American Steel & Wire Company. In 1899, became Foreign Sales Manager for the American Steel and Wire Company. In October, 1903, was elected President of the United States

Steel Products Export Company, now known as the United States Steel Products Company, and continued to act in that capacity until February 1, 1911, when he became President of the United States Steel Corporation. Director of a large number of the subsidiary companies of the United States Steel Corporation.

Member of Chamber of Commerce, New York City.

Business address: 71 Broadway, New York City.

Home address: 249 Garfield Place, Brooklyn, N. Y.

EDGAR CONWAY FELTON

PRESIDENT,
PENNSYLVANIA STEEL COMPANY

BORN in Thurlow, Pa., April 13, 1858, son of Samuel Morse and Maria Low (Lippitt) Felton. Educated in private schools in Philadelphia, Pa., and graduate of Harvard University, A. B., 1879.

In 1880, entered the chemical laboratory of the Pennsylvania Steel Company at the Steelton Works and was soon after placed in charge of the Forge and Special Steels Department. Left to enter the employ of the Sanderson Steel Company, Syracuse, N. Y., but later returned to Steelton and became successively, Foreman of Merchant Mill; Assistant Superintendent, Superintendent of Steelton Works, General Manager of the company and in 1895, was elected President. President of Pennsylvania Steel Company of N. J., Pennsylvania Steel Company of Pa., Penn-Mary Coal Company, Cornwall Ore Banks Company, Baltimore & Sparrows Point R. R. Company; Vice-President, Maryland Steel Company, The Spanish-American Iron Company and Cornwall & Lebanon R. R. Company.

Member of the American Institute of Mining Engineers, American Society of Mechanical Engineers, the Harvard Engineering Society, Franklin Institute, Pennsylvania Engineering Society. Member of Philadelphia, Union League, University, Art and Harvard Clubs, Philadelphia; Harvard Club, New York; Harrisburg Club; American Club, Havana and others. Trustee of Drexel Institute, Western Savings Fund Society. School Director, Haverford, Pa.

Business address: Morris Bldg., Philadelphia, Pa.

Home address: Haverford, Pa.

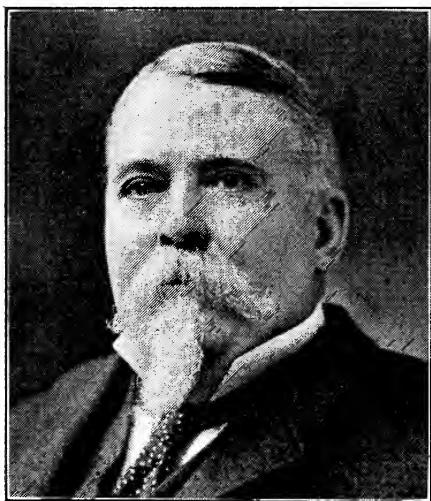
WILLIS LARIMER KING

VICE-PRESIDENT,

JONES AND LAUGHLIN STEEL COMPANY

BORN in Pittsburgh, Pa., February 14, 1851, son of Hugh Davidson and Eliza Ann (McMasters) King. Educated in public schools and Newell's Academy, Pittsburgh, Pa., and Washington and Jefferson College, Canonsburg, Pa.

In 1869, entered the employ of the firm of Jones and Laughlin, and was successively promoted through various grades for the most



part in the Sales Department to the position of Vice-President of the Jones and Laughlin Steel Co., which position he has filled for many years. Director of Vesta Coal Co., Interstate Iron Co., Leetonia Mining Co., Blair Supply Co., Blair Limestone Co., Pittsburgh Mercantile Co., Ross Land

Co., Woodlawn Land Co., Woodlawn Water Co., Eastern R. R. Co., State Line & Lake Erie R. R. Co., Fairhaven & Georgetown R. R. Co., Monongahela Connecting R. R. Co., Aliquippa and Southern R. R. Co., and Woodlawn and Southern Street Railway Co.

Member of Duquesne Club, Allegheny Country Club, and Pittsburgh Golf Club.

Business address: Jones and Laughlin Office Building, Pittsburgh, Pa.

Home address: 4900 Wallingford St., Pittsburgh, Pa.

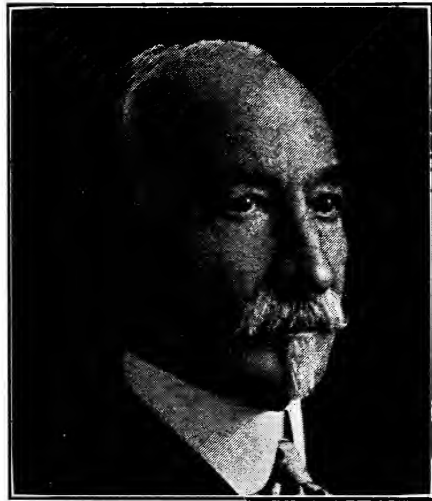
JOHN CAMPBELL MABEN

PRESIDENT,

SLOSS-SHEFFIELD STEEL & IRON COMPANY

BORN in Petersburg, Va., December 31, 1839, son of John and Elizabeth Moore (Campbell) Maben. Educated in private schools of Richmond, Va., and Princeton, N. J.

Moved from Richmond, Va., to New York City in 1868, and became a partner in the banking house of Lancaster, Brown & Co. After panic of 1873, started business on his own account as an Investment Broker. Was one of the organizers and Directors of Richmond-West Point Terminal Railway & Warehouse Co., now a part of Southern Railway system. Took an active part in 1887, in organizing the Sloss Iron and Steel Co., and in 1899, the Sloss-Sheffield Steel & Iron Co.,



its successor. Director since its formation. Became President in 1902. Also Director of Northern Alabama Railway Co., and Lanston Monotype Machine Co.

Served in the Confederate Army, 1861-1865, in the 12th Virginia Regiment and later as Captain of Cavalry. Member Southern Club and Country Club, Birmingham, Ala.; Union Club, Confederate Veteran's Camp and Virginia Society of New York City.

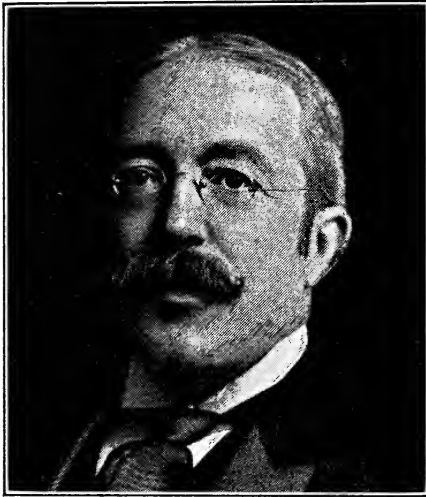
Business address: Birmingham, Alabama.

Home address: Birmingham, Alabama.

SAMUEL MATHER

SENIOR PARTNER,
PICKANDS, MATHER AND COMPANY

BORN in Cleveland, Ohio, July 13, 1851, son of Samuel Livingston and Georgiana Pomeroy (Woolson) Mather. Educated in the public schools of Cleveland, Ohio, and at St. Marks School, Southboro, Mass. Has received the degrees of Bachelor of Arts from Adelbert College, Western Reserve University and Doctor of Laws from Kenyon College, Gambier, Ohio.



Began in the office of his father, who was then President of the Cleveland Iron Mining Company of Cleveland, Ohio, and Marquette, Michigan. In 1883, formed the firm of Pickands, Mather and Company, iron ore, coal and pig iron merchants, of which Mr. Mather is now the senior partner. Director, United States

Steel Corporation, Lackawanna Steel Co., Cleveland-Cliffs Iron Co., and of several banks and trust companies.

Member of Executive Committee, National Civic Federation. President of Lakeside Hospital and Children's Aid Society. Trustee of Western Reserve University, Kenyon College, "Hiram House," "Goodrich House," and Cleveland Humane Society. Warden of Trinity Cathedral (Episcopal).

Business address: Cleveland, O.

Home address: 2605 Euclid Ave., Cleveland, O.

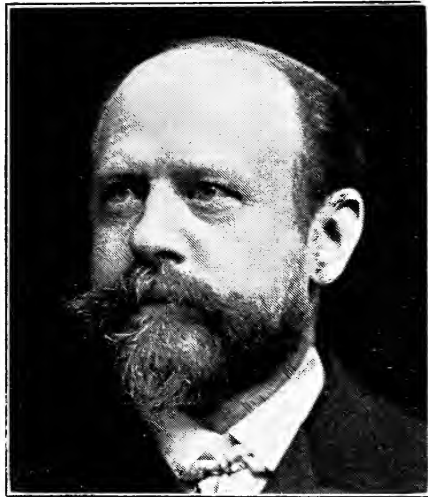
WILLIAM ARTHUR ROGERS

PRESIDENT,

ROGERS-BROWN IRON COMPANY

BORN in Berkshire, Tioga Co., N. Y., September 8, 1851, son of Dr. Melancthon and Eleanor Root (Silliman) Rogers. Graduate of Yale University, Sheffield Scientific School, Ph. B., 1874.

Began in 1874, as clerk with L. R. Hull & Company, Cincinnati, pig iron merchants, and in 1877, was made junior partner. Later, organized the firm of Rogers & Trivett, which, after the death of Mr. Trivett, became the firm of Rogers, Brown & Co., of which he has been senior partner ever since. In 1890, removed to Buffalo, N. Y., to take charge of the Buffalo interests of Rogers, Brown & Co. and of the Tonawanda Iron & Steel Co. near that city. President, Rogers-Brown Iron



Co.; Tonawanda Iron & Steel Co., Punxsutawney Iron Co., Niagara Iron Mining Co., Rogers Iron Mining Co., Munro Iron Mining Co. Vice-President, Iroquois Iron Co., Buffalo Steamship Co., and Cascade Coal & Coke Co. Director, Rogers-Brown Ore Co., Cleveland Furnace Co., Ontario Power Co., and of several banks.

Member of Century Association, New York; Buffalo, University, Country and Ellicott Clubs, Buffalo.

Business address: Buffalo, N. Y.

Home address: 309 North St., Buffalo, N. Y.

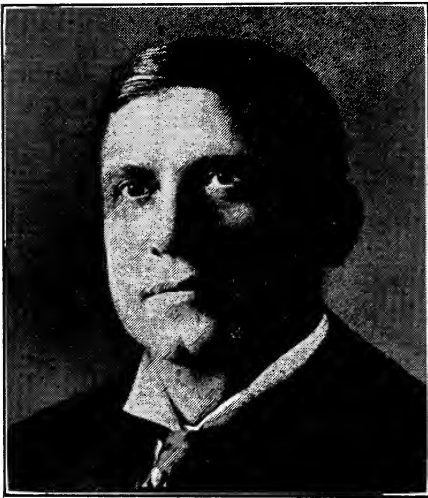
CHARLES MICHAEL SCHWAB

PRESIDENT,

BETHLEHEM STEEL CORPORATION

BORN in Williamsburg, Blair Co., Pa., February 18, 1862, son of John A. and Pauline (Farabaugh) Schwab. Educated at St. Francis College, Loretto, Pa.

Began as clerk in grocery store, Braddock, Pa. In 1881, obtained employment at the Edgar Thomson Works of the Carnegie Co., and in less than a year was Capt. Jones' Chief Assistant. On death of Capt. Jones,



became Superintendent of Edgar Thomson Works and in 1892, of Homestead Works also; in 1897, made President of the Carnegie Steel Co., and in 1901, became President of the United States Steel Corporation, continuing until 1904, when he resigned to become President of the Bethlehem Steel Corporation, in

which he owns a large interest. Director in a large number of steel, coal and coke, and banking corporations.

Public gifts include a magnificent Catholic Church at Loretto, Pa.; Church at Braddock, Pa.; a convent house at Cresson, Pa.; an industrial school, at Homestead, Pa.; School at Weatherly, Pa.; Auditorium to Penn. State College; and a Summer Sanitarium for Children, Staten Island.

Business address: 111 Broadway, New York.

Home address: Riverside Drive, New York.

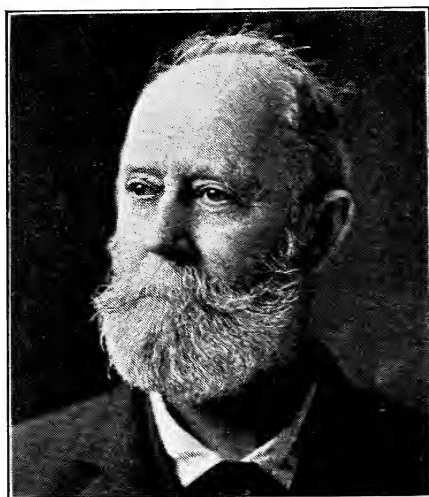
POWELL STACKHOUSE

PRESIDENT,
CAMBRIA IRON COMPANY

BORN in Philadelphia, Pa., July, 1840, son of Joseph Dilworth and Sarah Phipps (Shaw) Stackhouse. Educated in the public schools of Philadelphia, Pa.

In 1856, entered the employ of Wood, Morrell & Co., lessees of the Cambria Iron Works, at first in the store and later in the general office. In 1866, became Superintendent of the Johnstown Manufacturing Co., a subsidiary of the Cambria

Iron Co., and in 1868, Assistant Superintendent of the Cambria Iron Co. Resigned Dec. 31, 1873, to become General Agent of the Republic Iron Co., Marquette, Mich., remaining until Dec. 31, 1876. In May, 1878, became Assistant and Acting General Manager of Cambria Iron Co.; April



20, 1880, Comptroller; Jan. 24, 1884, Vice-President and Jan. 19, 1892, President. Became President of the Cambria Steel Co. in 1898. Retired in March, 1910. Now President, Cambria Iron Co.; Director, many other Cos. Served through the Civil War in the 3rd, 133rd and 198th Penna. Regiments rising to rank of Major.

Member of the Loyal Legion. Member, Union League Club, Phila. and Springhaven Country Club.

Business address: Morris Bldg., Philadelphia, Pa.

Home address: Wallingford, Delaware Co., Pa.

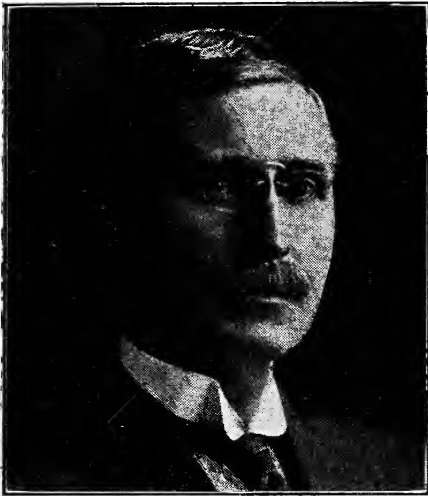
JOHN ALEXANDER TOPPING

CHAIRMAN,

REPUBLIC IRON AND STEEL COMPANY

BORN in St. Clairsville, Belmont Co., Ohio, June 10, 1860, son of Henry and Mary (Tallman) Topping. Educated in the public and high schools of Kansas City, Mo.

Began his business career as bank clerk in Bellaire, Ohio, remaining one year. In 1878, entered the iron business in the employ of the Aetna Iron and Nail Co., and was elected President of the company in 1898. This



company was merged with another to form the Aetna-Standard Iron & Steel Co., which was in turn merged in the American Sheet Steel Co., of which Mr. Topping was elected First Vice-President in 1900. Resigned in July, 1903, and later in the same year, undertook the reorganization of the La Belle Iron Works. In

July, 1904, was elected President of the American Sheet & Tin Plate Co., remaining until January, 1906, when he became President of the Republic Iron & Steel Co. and Chairman of the Tennessee Coal, Iron & Railroad Co. In 1908, elected Chairman of the Republic Iron & Steel Co.

Member of the Duquesne Club, Pittsburgh; Union League and New York Athletic Clubs, New York; Fairfield Co. Club, Greenwich, Conn.; and other clubs.

Business address: 115 Broadway, New York City.

Home address: Greenwich, Conn.

JESSE FLOYD WELBORN

PRESIDENT,

THE COLORADO FUEL AND IRON COMPANY

BORN near Ashland, Neb., March 9, 1870, son of John Wesley and Jennie (Roberts) Welborn. Educated in the public schools of Indianola, Neb.

At first, worked as clerk and later as Assistant Cashier in banks at Indianola and McCook, Neb., in the period 1887 to 1890. In 1890, entered the employ of the Colorado Fuel and Iron Company and has been

with the company continuously since that time. From 1890 to 1899, was connected with the Sales Department, starting as clerk and being subsequently promoted through various grades in both the Fuel and Iron Departments to the position of General Eastern Agent in New York City, which he held in 1899. From 1899



to 1903, was General Sales Agent of the company. In September, 1903, was elected Vice-President and had charge of the Sales and Traffic Departments, continuing in this position until March, 1907, when he was elected President, succeeding Mr. F. J. Hearne. Also President of the various subsidiary companies of the Colorado Fuel & Iron Co.

Member of Denver Club and Denver Country Club.

Business address: Boston Building, Denver, Colo.

Home address: 1065 Logan Street, Denver, Colo.

JAMES THOMPSON McCLEARY

SECRETARY,
AMERICAN IRON AND STEEL INSTITUTE

BORN in Ingersoll, Ontario, Canada, February 5, 1853, son of Thompson and Sarah (McCutcheon) McCleary. Educated in the public schools of Ingersoll, Ontario, and at McGill University, Montreal.

Taught school in Wisconsin and soon became Superintendent of Schools for Pierce County, Wis. Resigned in 1881, to become Professor of History and Civics in the



State Normal School at Mankato, Minn., continuing in this position eleven years. In 1892, was elected to Congress from the Second Minnesota District and served continuously for fourteen years (1893-1907). In March, 1907, was appointed by President Roosevelt, Assistant Postmaster General in charge of the trans-

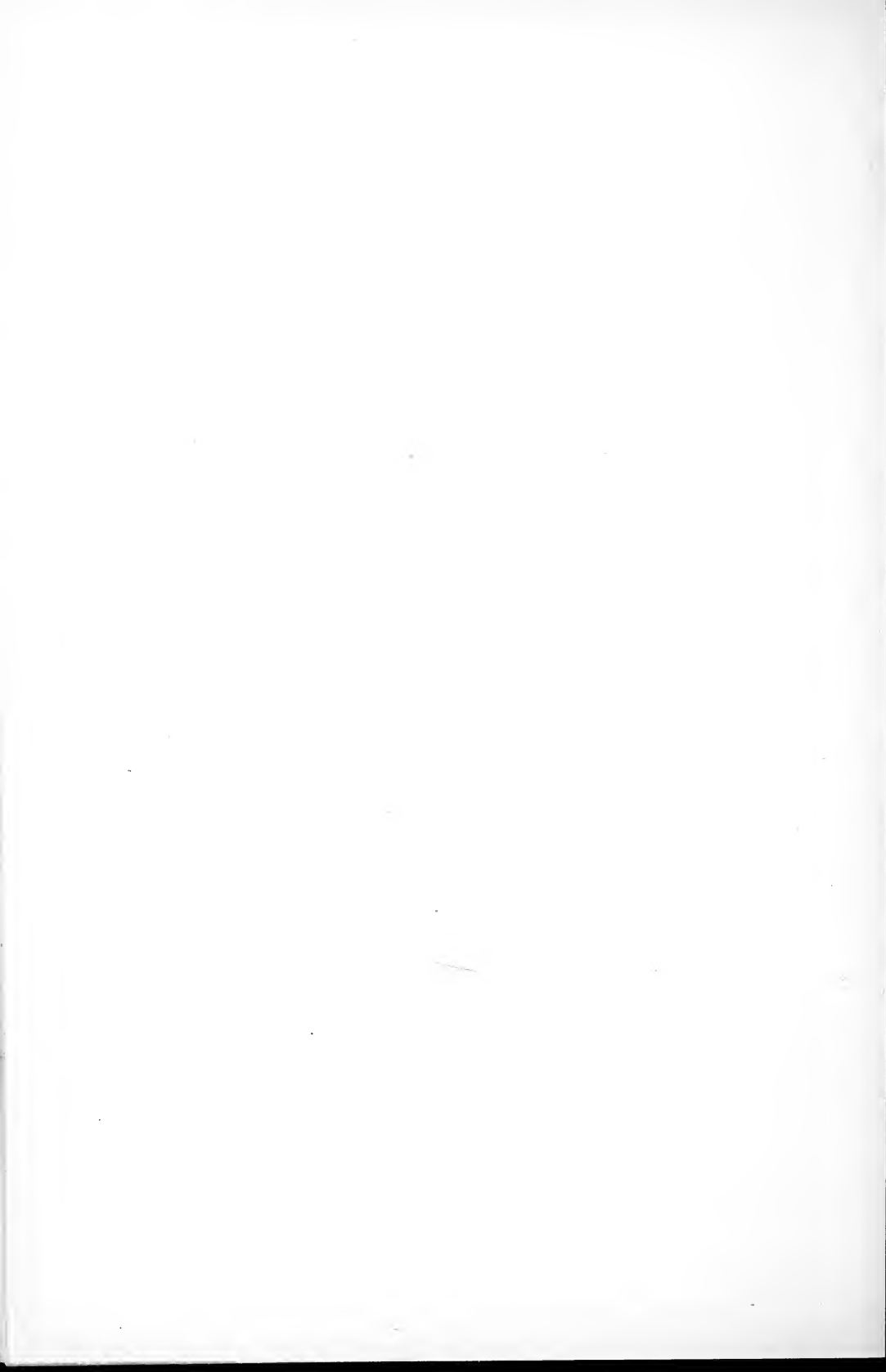
portation of the mails on land and sea. Elected Secretary of the American Iron and Steel Institute, January 11, 1911. Author of Studies in Civics, 1888; Manual of Civics, 1894; Protection, America's Proper Permanent Policy (in press).

President of the Lincoln Memorial Road Association of America. Life member of Minnesota State Historical Society. Member of the Railroad Club, New York.

Business address: Room 920, 30 Church St., N. Y.

Home address: Waldorf-Astoria, New York City.

HONORARY MEMBERS



ROBERT FORSYTH

CONSULTING ENGINEER

BORN in Troy, N. Y., September 28, 1849, son of James and Sarah (Tibbits) Forsyth. Educated in private schools, and Rensselaer Polytechnic Institute, C. E., 1869.

Student and draftsman at Bessemer Works, Troy, N. Y., under A. L. Holley, 1870-71. Superintendent, Bessemer Department, North Chicago Rolling Mill (North and South Works) 1872-1883; Superintendent, Spang Steel & Iron Co., Pittsburgh, 1884. Manager of Union Steel Co., Chicago, 1885-1889; Chief Engineer, Illinois Steel Co., 1889-1896; since 1896, engaged in practice as a Consulting Engineer and expert in the metallurgy of Iron and Steel, and appraisal of plants and properties.



Member, Iron and Steel Institute, Great Britain; American Society of Civil Engineers; American Society of Mechanical Engineers; American Institute of Mining Engineers; Western Society of Engineers. Member of Union, University and Engineers' Clubs, New York; Chicago, University, Union, and Caxton Clubs, Chicago; Duquesne Club, Pittsburgh; Troy Club, Troy, N. Y. Trustee of John Crerar Library, Chicago.

Business address: 1159, The Rookery, Chicago, Ill.

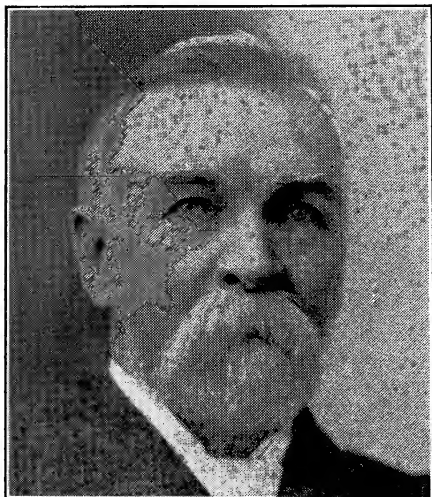
Home address: The Walton, Chicago, Ill.

JOHN FRITZ

MECHANICAL ENGINEER

BORN in Chester Co., Pa , August 21, 1822, son of George and Mary (Maharg) Fritz. Educated in the old pay school, preceding the free common schools. Honorary degrees from University of Pennsylvania, Stevens Institute and Columbia University.

In 1838, apprenticed to blacksmith's trade; later employed at Norristown (Pa.) Iron Works and soon became



Mill Superintendent. In 1854, became Superintendent and Engineer of the Cambria Iron Works, Johnstown, Pa. In 1860, was appointed Superintendent and Engineer of the Bethlehem Iron Co. and built the works of that company, now the Bethlehem Steel Co. Retired in 1893. Inventor of the three-high mill.

Elected, in 1893, honorary member of The Iron and Steel Institute of Great Britain and received the Bessemer Gold Medal. Later made Honorary Life Vice-President of the Institute. Life member, American Society of Mechanical Engineers (Vice-President, 1882-1884 and President, 1895-1896). Member, American Institute of Mining Engineers (President, 1894). Honorary member of the American Society of Civil Engineers and the Franklin Institute.

Home address: Bethlehem, Pa.

HENRY MARION HOWE

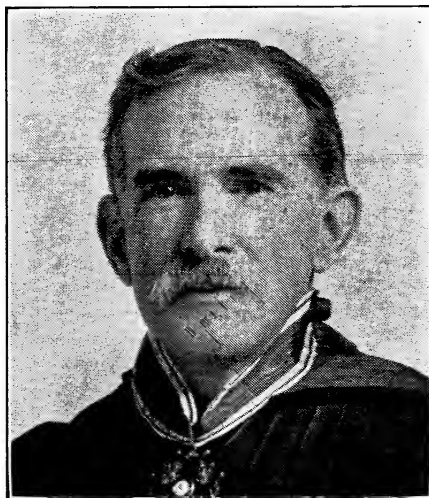
CONSULTING METALLURGIST,
PROFESSOR OF METALLURGY, COLUMBIA UNIVERSITY

BORN in Boston, Mass., March 2, 1848, son of Samuel Gridley and Julia (Ward) Howe. Educated in schools of Boston, graduate Harvard College, A. B., 1869; A. M., 1872; LL.D., 1905; Lafayette College, LL.D., 1905.

1880-82, designed and built the works of the Orford Nickel and Copper Co.; 1883-97, Consulting Metallurgist, and Lecturer on Metallurgy, Mass. Institute of Technology; since 1897, Professor of Metallurgy in Columbia University.

Author of "Metallurgy of Steel," and other books.

Knight with Star of the Order of St. Stanislas, Russia; Chevalier of the Légion d' Honneur, of France; honorary member, Russian Imperial Technical Society; Société d'Encouragement pour



L'Industrie Nationale, of France; Royal Academy of Science, Sweden; British Institution of Mining and Metallurgy; Past President, American Institute of Mining Engineers. President, Inter. Assn. for Testing Materials; President, Amer. Assn. for Testing Materials. Recipient of the Bessemer Gold Medal, gold medal of Verein zur Beförderung des Gewerbfleisses of Germany, Elliot Cresson Gold Medal of the Franklin Institute. Member of Century, Harvard, and Technology Clubs.

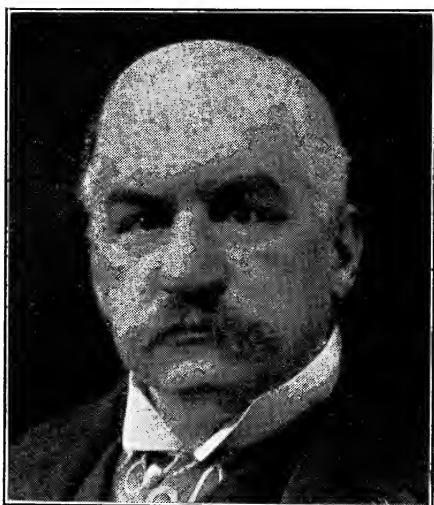
Home address: McLean Road, Bedford Hills, N. Y.

JOHN PIERPONT MORGAN

BANKER

BORN in Hartford, Conn., April 17, 1837, son of Junius Spencer and Juliet (Pierpont) Morgan. Graduate of the English High School, Boston, Mass., and student at the University of Goettingen.

In 1857, became connected with Duncan, Sherman & Co., bankers, and in 1860 was appointed Agent and Attorney in the United States for George Peabody & Co.,



London, the house in which his father was partner. In 1864, became junior partner in the firm of Dabney, Morgan & Co., succeeded by Drexel, Morgan & Co., and J. P. Morgan & Co., of which Mr. Morgan is the senior partner. Has reorganized and consolidated many of the largest railway systems and has organized and

financed many of the largest industrial companies. Art connoisseur and bibliophile. Donor of large sums to public institutions.

Member of the Union, Knickerbocker Union League, Metropolitan, Century, New York Yacht, Seawanhaka-Corinthian, Tuxedo, Racquet and Tennis, Riding, Church, City, Mid-Day, Players, Grolier, Jekyl Island and Turf Clubs, New York; Metropolitan Club, Washington, etc.

Business address: 23 Wall Street, New York City.

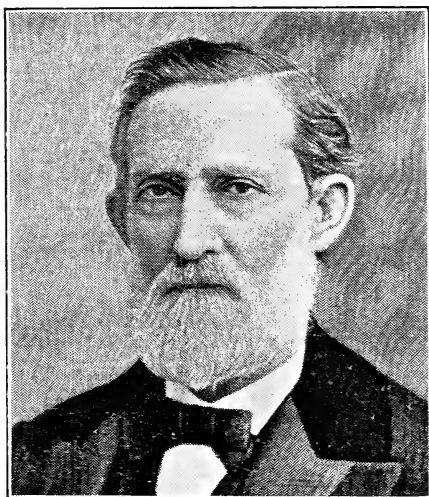
Home address: 219 Madison Avenue, New York.

JAMES MOORE SWANK

SECRETARY AND GENERAL MANAGER,
AMERICAN IRON AND STEEL ASSOCIATION

BORN in Westmoreland County, Pa., July 12, 1832, son of George W. and Nancy (Moore) Swank. Educated in the public schools of Johnstown, Pa., at Elders Ridge Academy and at Jefferson College. Honorary degrees: Ph.D., 1900, Washington and Jefferson College; LL. D., 1909, Temple University, Philadelphia.

Began, in 1852, the publication of a newspaper in Johnstown, Pa., and, in 1853, founded the Johnstown Tribune of which he was the editor and publisher to 1870. Then became Clerk of the Committee on Manufactures, House of Representatives. In 1871-72, was Chief Clerk of the Department of Agriculture. In December, 1872, took charge of the American Iron and Steel Association as Secretary and since 1885 has been General Manager as well.



Author of History of the Department of Agriculture, 1872; Iron Making and Coal, Mining in Pennsylvania, 1878; History of the Manufacture of Iron in All Ages, 1884; 2d ed., 1892; Notes and Comments, etc., 1897; Progressive Pennsylvania, 1908; Cambria County Pioneers, 1910; and the publications of the Association.

Business address: 261 South Fourth St., Phila., Pa.
Home address: The Colonial, Phila. Pa.

GEORGE WOODWARD WICKERSHAM

ATTORNEY GENERAL OF THE UNITED STATES

BORN in Pittsburgh, Pa., September 19, 1858, son of Samuel Morris and Elizabeth O. (Woodward) Wickersham. Student at Lehigh University, 1873-75; graduate, University of Pennsylvania, Law School, LL.B., 1880. Honorary M.A., 1901; LL.D., 1909, Lehigh University.

Practiced law in Philadelphia, 1880-82; then removed to New York and continued the practice of law.



Member of the firm of Strong & Cadwalader, 1887-1909. Attorney General of the United States in the Cabinet of President Taft since March 4, 1909. Counsel for New York State Savings Bank Assn., 1890-1900: Member of and Counsel for committee on reorganization of Chicago traction lines; Counsel of

construction company, New York Subway; General Counsel, Interborough Rapid Transit Co. 1902-1908.

Member, Bar Assn., City of New York, New York State Bar Assn. and American Bar Assn.

Member of Metropolitan, Century, Church, Grolier, Down Town, and Republican Clubs, New York; Rock-away Hunting Club; Metropolitan and Chevy Chase Clubs, Washington, D. C.

Business address: Dept. of Justice, Washington, D. C.

Home address: 1312 16th Street, Washington, D. C.

MEMBERS



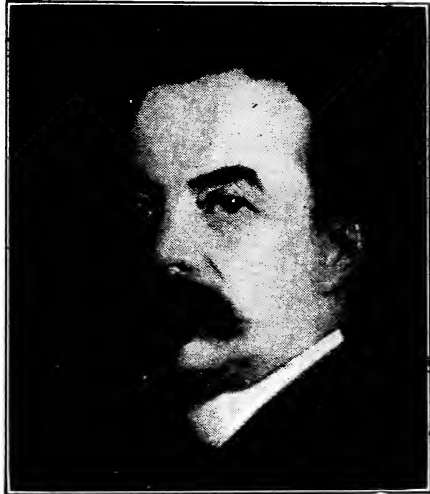
EDWARD DEAN ADAMS

DIRECTOR,

ALLIS-CHALMERS COMPANY

BORN in Boston, Mass., April 9, 1846, son of Adoniram Judson and Harriet Lincoln (Norton) Adams. Educated Chauncey Hall School; Mass. Institute of Technology, 1869. Norwich Univ. B. S., M. S., LL.D.

Partner in firm of Richardson, Hill & Co., Bankers, Boston; 1878 to 1893, partner, Winslow Lanier & Co., Bankers, New York; 1893 to present time, representative in New York of the Deutsche Bank, Berlin. Prominent in the reorganization of the West Shore R. R. Co., (1886); Central R. R. of New Jersey (1887); American Cotton Oil Co. (1890); Northern Pacific R. R. Co. (1896); Chicago Terminal and Transfer Co. (1897). President and Director of the Lehigh Coke



Co., Director of Allis-Chalmers Co., American Cotton Oil Co., Niagara Power Co., and many other companies.

In 1909, received the Decoration of the Royal Order of the Crown of Prussia. Member, American Institute of Electrical Engineers, Amer. Society of Civil Engineers. Member of City, Engineers', Lawyers', Metropolitan, Players', Railroad, Union League and other Clubs of New York; Caxton and Chicago Clubs, of Chicago.

Business address: 71 Broadway, New York.

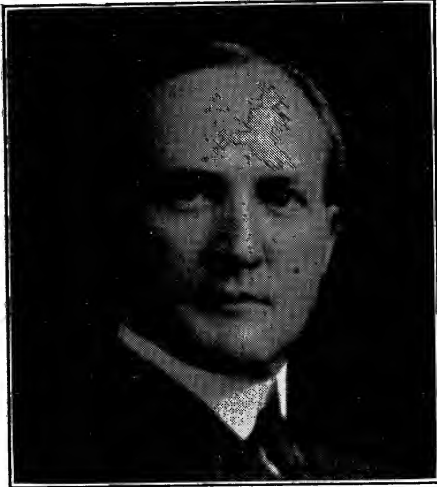
Home address: 455 Madison Avenue, New York.

JAY ISMON ANDREWS

GENERAL MANAGER OF SALES,
AMERICAN SHEET & TIN PLATE COMPANY

BORN in Lakeland, Washington Co., Minn., February 14, 1869, son of William Brown and Kate (Ismon) Andrews. Educated in common and high schools, Hudson, Wis., and at Macalester College, St. Paul, Minn.

Entered the employ of the Illinois Steel Company, in October 1889, continuing with the company for three years, at first in their general offices in Chicago and



later at their Union works and South Chicago Works; re-entered the steel business in June, 1900, with the American Sheet Steel Company at its general offices in New York. Became Assistant General Manager of Sales of the American Sheet and Tin Plate Company on October 1, 1905, and succeeded to the position of General

Manager of Sales of the American Sheet and Tin Plate Company with offices in Pittsburgh, Pa., January 1, 1909.

Member of Duquesne Club, Pittsburgh; Pittsburgh Athletic Association; Thornburg Country Club; Union Club, Cleveland; Railroad Club, New York; and the Masonic Fraternity.

Business address: 1324 Frick Bldg., Pittsburgh, Pa.
Home address: 83 South Linwood Ave., Crafton, Pa.

MATTHEW ANDREWS

PARTNER,

M. A. HANNA AND COMPANY

BORN near East Liverpool, Ohio, March 29, 1865, son of Thompson J. and America (Andrews) Andrews. Educated in the public schools of East Liverpool, Ohio.

In 1882, entered the employ of the Pennsylvania Co. in Cleveland as clerk, and after seven years of service in different capacities, entered the employ of James W. Ellsworth & Co. After two years, became Superintendent of their ore docks and was also identified with their coal business. In 1899, joined M. A. Hanna & Co. as General Superintendent of their Ore Docks and Transportation Department. Became a member of the firm of M. A. Hanna & Co., January 1, 1906. President, The Eastern Coal Dock Co., The Ironville Dock & Coal



Co.; Vice-President, American-Boston, Croxton, Hollister, LaRue, and Virginia Ore, Mining Cos.; Pittsburgh Iron Ore Company, Richmond Iron Co., United Iron & Steel Co., and a number of coal, coke and steamship companies; Director, The Mahoning Ore & Steel Co.

Member of the Duquesne Club, Pittsburgh; Union, Tavern, Country, Euclid, Mayfield, Hunt and Athletic Clubs of Cleveland.

Business address: Cleveland, O.

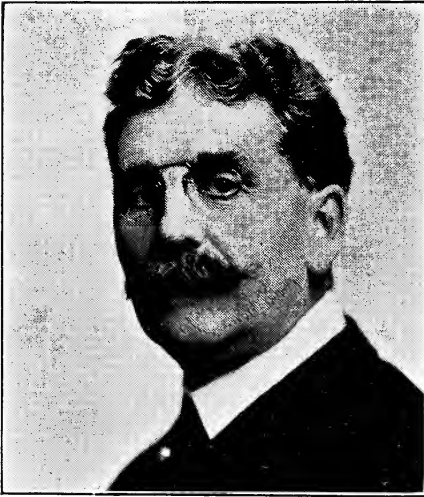
Home address: Bratenahl Road, Cleveland, O.

M. COCHRANE ARMOUR

PARTNER,
ROGERS, BROWN & COMPANY

BORN in Auburn, N. Y., January 11, 1851, son of John and Lillias (Cochrane) Armour. Educated in the public schools of Marshall, Michigan.

Entered the employ of firm of George Ingersoll, grain merchants, Marshall, Mich., as clerk and later conducted a merchandise business under the firm name of J. & M. C. Armour. In 1878, engaged with The



Adams Westlake Mfg. Co., of Chicago. Since December, 1890, has been a partner in the firm of Rogers, Brown & Co., and also President of the Iroquois Iron Co., since its organization in 1899. Also Vice-President and Director, Rogers Iron Mining Co., and Director, Rogers, Brown Ore Co., Chicago

Short Line Ry. Co., and Lake Superior Iron & Chemical Co.

Member of Union League Club, Chicago; University and Country Clubs, Evanston, Ill.; Trustee of Northwestern University, Evanston; President, Board of Trustees, McCormick Theological Seminary, Chicago; Trustee Occidental College, Los Angeles, Cal.; Trustee, First Presbyterian Church, Evanston; Trustee of Evanston School Board for some years past.

Business address: Chicago, Ill.

Home address: 1608 Ridge Avenue, Evanston, Ill.

FRANK BAACKES

VICE-PRESIDENT AND GENERAL SALES AGENT,

AMERICAN STEEL & WIRE COMPANY

BORN in St. Toenis, Germany, March 9, 1863, son of Godfrey Michael and Franziska (Maassen) Baackes. Educated in public schools of St. Toenis, and High School, Crefeld, Germany.

Started in this country in 1889, with the H. P. Nail Co., Cleveland. In 1894, went to Beaver Falls to erect a wire plant for the Hartman Steel Co. During the latter

part of 1895, organized the Salem Wire Nail Co., of Salem, Ohio, and remained with them as Superintendent and General Manager, until their absorption by the American Steel & Wire Co., of Illinois, in 1897, when he became General Manager of the latter company. On the organization of the American Steel & Wire Co.



of New Jersey, in 1899, became General Superintendent of that company; in June, 1900, was appointed General Sales Agent, and later elected Vice-President and General Sales Agent.

Member of Union League, Chicago Athletic Association, South Shore Country Club, Mid-Day Club, Chicago Automobile Club and Germania Club of Chicago; Lawyers, Engineers and Railroad Clubs, New York.

Business address: 115 Adams Street, Chicago, Ill.

Home address: 4932 Lake Avenue, Chicago, Ill.

GEORGE BARTOL

GENERAL MANAGER,
OTIS STEEL COMPANY, LIMITED

BORN in Lancaster, Mass., May 16, 1857, son of George M. and Elizabeth K. (Washburn) Bartol. Graduate of Massachusetts Institute of Technology, with the degree of S. B., 1877.

Entered the employ of the Otis Iron and Steel Company in February, 1879, as chemist and was promoted through various positions to the post of General Manager of the Company in 1895, which position he has held continuously since that time. Also President of Colonial Realty Company, Warner Realty Company, Vice-President of the Commercial Building Company; Director of the First National Bank, (Cleveland), Eastward Realty Company, and Allegheny Coal Company.



Member of the American Institute of Mining Engineers, American Society of Mechanical Engineers, Civil Engineers' Club of Cleveland, Ohio. Member of Union Club and University Club of Cleveland, Ohio. Trustee of the St. Clair Hospital, Cleveland, Ohio.

Business address: Otis Steel Co. Ltd., Cleveland, O.

Home address: 1832 Crawford Road, Cleveland, O.

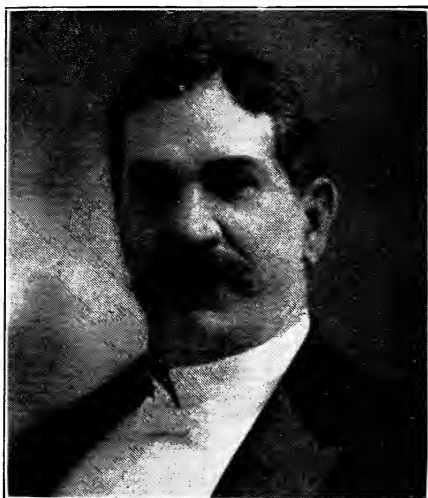
JOHN GORDON BATTELLE

PRESIDENT,

COLUMBUS IRON AND STEEL COMPANY

BORN in Clarksburg, Va., May 12, 1845, son of Rev. Gordon and Maria Louisa (Tucker) Battelle. Educated at Fairmont Academy, Fairmont and Lindsley Institute, Wheeling.

In 1867, became Secretary and General Superintendent of the Norway Mfg. Co., Wheeling, and in 1869, Superintendent of the Memphis Rolling Mill, Memphis, Tenn. Later engaged in the manufacture of cotton presses, etc., at Brooklyn, N. Y. In 1883, removed to Piqua, Ohio, and became Vice-President and General Manager of the Cincinnati Corrugating Co., and President and General Manager of the Piqua Rolling Mill Co. After the sale of the Piqua plants to the American



Sheet Steel Co., became Vice-President of the latter and later President of Columbus Iron and Steel Co. Director of Inland Steel Co.; Wood Shovel and Tool Co., etc.

Served on staff of Governor Nash of Ohio with rank of Colonel. Member, Columbus Chamber of Commerce; Ohio State Board of Commerce; Director, National Assn. of Manufacturers; First Vice-President, Ohio Manufacturers Assn. Member Columbus Club, Columbus, etc.

Business address: Columbus, O.

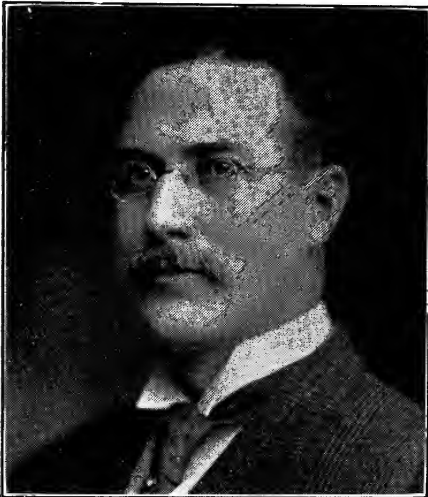
Home address: 662 East Town St., Columbus, O.

EPHRAIM BAYARD

GENERAL SUPERINTENDENT, DONORA STEEL WORKS,
AMERICAN STEEL & WIRE COMPANY

BORN in Choybogan, Mich., July 18, 1868, son of Robert and Ellen (Johnston) Bayard. Educated in the public schools of Choybogan, Mich.

In 1884, entered the steel business in the service of the Joliet Iron & Steel Co., as water boy and remained with the company until 1900, being promoted through various grades to the post of Superintendent of the



Bessemer Department, which he held from 1897 to 1900, resigning in the latter year in order to accept a position with the American Steel & Wire Company, in Cleveland, Ohio. Since 1900, has been with the American Steel and Wire Co., in the following positions: from 1900 to 1904, Superintendent of Bessemer De-

partment and Rolling Mills, Newburgh Steel Works, Cleveland, Ohio; from 1904 to January 1, 1909, General Superintendent of Shoenberger Works, Pittsburgh, Pa.; since January 1, 1909, Superintendent of the Donora Steel Works, Donora, Pa.

Member of Duquesne Club, Pittsburgh, and Pittsburgh Athletic Association.

Business address: Donora Steel Works, Donora, Pa..

Home address: Donora, Pa.

SAMUEL ARMSTRONG BENNER

ASSISTANT TO PRESIDENT,
PITTSBURGH STEEL COMPANY

BORN in Pittsburgh, Pa., May 16, 1871, son of Thomas M. and Mary (Armstrong) Benner. Educated in the public schools of Allegheny, Pa. and graduated from the Allegheny High School in 1888.

In 1888, became associated with Carnegie, Phipps and Company, Limited, and was for ten years employed in their general offices in Pittsburgh. From September 1, 1898 to September 1,

1900 was manager for the Carnegie Company in the Republic of Mexico, with headquarters in the City of Mexico. From September 1, 1902, to September 1, 1904, was President of the Orford Copper Company, New York City. From September 1, 1904, to January 1, 1911, was General Manager of



Sales for the Carnegie Steel Company, with office at Pittsburgh, Pa. On January 1, 1911, became Assistant to the President of the Pittsburgh Steel Company, and the Pittsburgh Steel Products Company. Also Director of South Side Trust Company, Pittsburgh.

Member of Duquesne Club, Pittsburgh Club, Allegheny Country Club, and Pittsburgh Country Club; all of Pittsburgh, Pa.

Business address: Frick Building, Pittsburgh, Pa.

Home address: 5006 Fifth Ave., Pittsburgh, Pa.

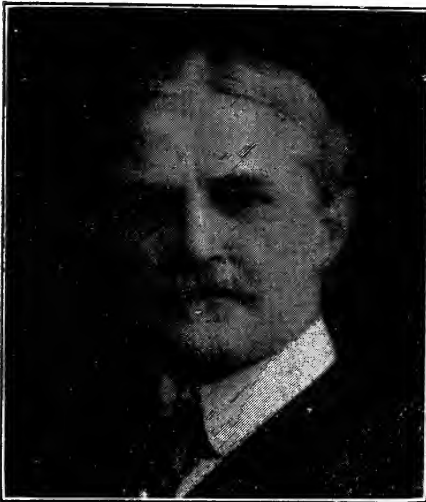
ROBERT BENTLEY

PRESIDENT,

THE OHIO IRON & STEEL COMPANY

BORN in Youngstown, Ohio, August 30, 1854, son of Martin and Mary (McCurdy) Bentley. Educated in public schools, Youngstown, Ohio, graduating from the Rayen High School, 1873.

From 1873-80, clerk and teller, First National Bank, Youngstown, Ohio; in 1880, with five others, purchased furnace property at Lowellville, Ohio, and formed the



Ohio Iron and Steel Co., with which he has ever since been connected and of which he is now President. Also President, Carbon Limestone Co., Interstate Limestone Co.; Vice-Pres., Orient Coke Co.; Orient Supply Co.; Ohio Leather Co.; Director, Crete Mining Co.; Youngstown Sheet & Tube Co.; Dollar Savings

and Trust Co.; First National Bank; Republic Rubber Co.; Tidewater Coal Co.; Sharon Foundry Co., and Holland Land Co. Secretary and Director, The Robert McCurdy Co., and the R. McCurdy Estate Co. President, The Ohio and Penna. Belt Line R. R. Co.

Member of Youngstown Club, Youngstown; Union Club, Cleveland; Duquesne Club, Pittsburgh. Life Director of The Youngstown Hospital Association.

Business address: Youngstown, Ohio.

Home address: 718 Wick Avenue, Youngstown, O.

WILLIAM WALLACE BLACKBURN

SECOND VICE-PRESIDENT AND SECRETARY
CARNEGIE STEEL COMPANY

BORN in Hollidaysburg, Pa., February 1, 1859, son of Joseph H. and Sarah J. (McConnell) Blackburn. Educated in the public schools of Hollidaysburg, Pa.

Began as general clerk with the Hollidaysburg Iron and Nail Company, Hollidaysburg, Pa., and remained with them two years. Then removed to Pittsburgh, Pa., and accepted a position with the firm of Wilson, Walker & Company, one of the Carnegie organizations, which at that time owned and operated the Lower Union Mills, Pittsburgh, now one of the plants of the Carnegie Steel Company. Has remained with the Carnegie Steel Company continuously since that time and was promoted through various grades to the office of Second Vice-President and Secretary of the Company. Also Secretary of a number of the subsidiary companies of the Carnegie Steel Company.



Member of the Duquesne Club, Union Club, University Club, Country Club and Pittsburgh Athletic Association, Pittsburgh. Trustee of Children's Hospital, Pittsburgh.

Business address: Carnegie Building, Pittsburgh, Pa.
Home address: 205 Lexington Ave., Pittsburgh, Pa.

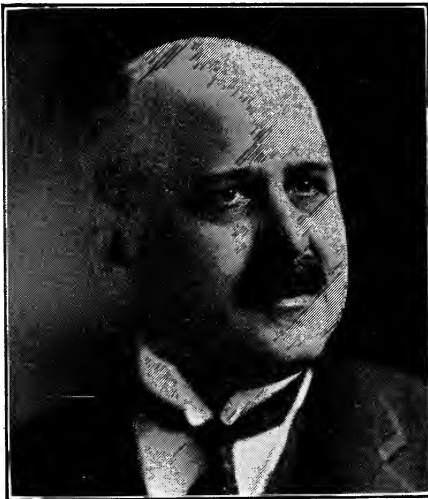
CHARLES HERBERT BOOTH

VICE-PRESIDENT,

UNITED ENGINEERING AND FOUNDRY COMPANY

BORN in Knoxville, Tennessee, January 17, 1861, son of Lloyd and Nan C. (Gilbert) Booth. Attended Western Reserve University, Hudson, O., Class of 1884.

Left College before graduating in order to join his father (the late Lloyd Booth) in the manufacturing business with the United Engineering and Foundry Company, this company being one of the pioneer builders



of rolling mill machinery in the United States. At present First Vice-President of the United Engineering and Foundry Company, of Pittsburgh, Pa. Also a Director of the Republic Rubber Company, Ohio Leather Company, General Fireproofing Company, Youngstown, Ohio. Vice-President and Director of the Youngs-

town and Southern Railway Company; Vice-President and Director of the First National Bank of Youngstown; Director and member of the Trust Committee of the Dollar Savings and Trust Company of Youngstown.

Member of the Youngstown Club, Youngstown; Duquesne Club and Pittsburgh Athletic Association, Pittsburgh. Trustee of the Charity Organization Society of Youngstown, Ohio.

Business address: Youngstown, Ohio.

Home address: 606 Wick Ave., Youngstown, Ohio.

HENRY P. BOPE

FIRST VICE-PRESIDENT,
CARNEGIE STEEL COMPANY

BORN in Lancaster, Ohio, September 19, 1858, son of Philip and Eliza A. (Weaver) Bope. Educated in the public schools of Lancaster, Ohio, supplemented by private study.

At first, devoted himself to stenographic reporting in the Ohio Legislature and for various public men. Became connected with the Carnegie interests in November, 1879, and has remained

with the company continuously since that time. Entered the Sales Department and was promoted through various grades to the position of First Vice-President and General Manager of Sales of the Carnegie Steel Company. Also President of the Mexican National Sugar Refining Company;



Vice-President of the Durazno Mines Company; Director of the Vanadium Mines Company and the Colorado Yule Marble Company, President of the Park Bank, Pittsburgh.

Member of the Railroad and Republican Clubs, New York; Duquesne Club, University Club, and Americus Republican Club, Pittsburgh. Associate member of several of the engineering and scientific societies.

Business address: Carnegie Bldg., Pittsburgh, Pa.

Home address: 327 No. Negley Ave., Pittsburgh, Pa.

CHARLES THEODORE BOYNTON

VICE-PRESIDENT AND SECRETARY,
PICKANDS, BROWN & COMPANY

BORN in West Stockbridge, Mass., December 5, 1858, son of Charles Sumner and Elizabeth (Thompson) Boynton. Educated in the public schools of Catskill, New York.

Came to Chicago in September, 1879, and entered the employ of the Washburn and Moen Mfg. Co., being promoted to the post of General Western Manager.



When the company was acquired by the American Steel and Wire Co., became General Sales Agent for that company. Resigned in 1900, to become President of the Shelby Steel Tube Co., and in 1902, became associated with Pickands, Brown & Co. President and Director, North Shore Consolidated Gas Co.; Di-

rector of Continental and Commercial National Bank, Continental & Commercial Trust Co., Central Trust Co. of Illinois, Zenith Furnace Co., Northwestern Iron Co., Calumet Insurance Co., The Dearborn Co., Buck and Raynor Co., Independent Railway Supply Co.

Member of the Chicago Club, Evanston Country Club, Exmoor Country Club, Onwentsia Country Club.

Business address: Chicago, Ill.

Home address: Highland Park, Ill.

THOMAS JOSEPH BRAY

PRESIDENT,
REPUBLIC IRON AND STEEL COMPANY

BORN in Pittsburgh, Pa., May 1, 1867, son of Thomas Joseph and Anna Jacova (Collins) Bray. Educated in the public schools of Pittsburgh, Pa., and graduate of Lehigh University in 1894, with the degree of Mechanical Engineer.

Served his apprenticeship, from 1883 to 1886, with the Lewis Foundry and Machine Co., and was with the Riverside Iron Works and Lewis Foundry and Machine Co., until 1890, when he left to complete his education. Was a student at Lehigh University, 1890-1894, in the mechanical engineering course. From 1894 to 1901, was with the Ohio Steel Co. and McGill & Co. In 1901, became Chief Engineer of the United Engineering and Foundry Co., remaining until 1906, when he became associated with the Republic Iron and Steel Co., as Assistant to the President, later Vice-President in charge of Operating Department, and in 1911, was elected President.



Member, American Society of Mechanical Engineers, Iron and Steel Institute (Great Britain); Duquesne, Oakmont and Country Clubs, Pittsburgh.

Business address: Oliver Building, Pittsburgh, Pa.

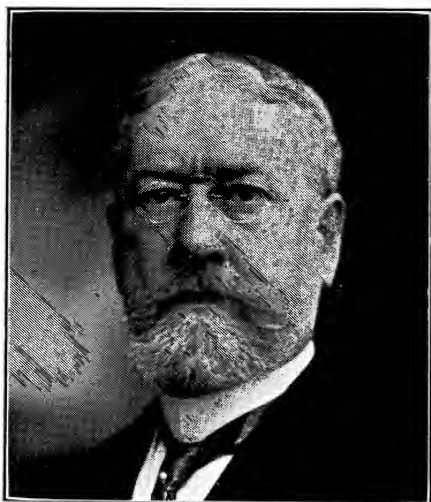
Home address: 334 So. Dallas Ave., Pittsburgh, Pa.

HENRY NEWMAN BRINSMADE

SECRETARY AND TREASURER,
PORT HENRY IRON ORE COMPANY

BORN in Brooklyn, N. Y., August 14, 1857, son of James Beebee and Jeanie (Newman) Brinsmade. Educated at Brooklyn Polytechnic Institute and graduate of the Rensselaer Polytechnic Institute, C. E., 1879.

After graduation, engaged in gold and silver mining in Colorado. In 1880, became Superintendent of the Mahopac Iron Ore Co., and two years later, General



Manager of the Everett Iron Co. Opened the coal and ore mines, and quarries of the last named company, and built and put in operation its plant. Resigned the position in 1885 on account of ill health. In the latter year, became a Director of the Poughkeepsie Iron Co., and was elected Secretary in 1892. In 1892, was

made Secretary and Director of the Forest of Dean Iron Ore Co., Director of the Port Henry Iron Ore Co., and Director of the Lake Champlain and Moriah R. R. Co. Was elected Secretary of the Lake Champlain and Moriah R. R. Co. in 1899 and Treasurer in 1909. Elected Secretary and Treasurer of the Port Henry Iron Ore Co., in 1908.

Member Delta Kappa Epsilon Fraternity.

Business address: 2 Rector St., New York.

Home address: 31 West 49th St., New York.

ROBERT EDWARD BROOKE

TREASURER,

E. & G. BROOKE IRON COMPANY

BORN in Birdsboro, Pa., July 7, 1872, eldest son of Edward and Annie Moore (Clymer) Brooke. Educated in Emerson Institute, Washington, D. C.; St. Paul's School, Concord, N. H., and graduate Yale University, Sheffield Scientific School, Ph. B., 1894.

After graduation, was employed as clerk at the blast furnaces of the E. & G. Brooke Iron Co., and continued as such until 1898, when he was made Treasurer of the company. In 1899, was also made manager of blast furnaces for the company, and still holds the dual position. Since 1902, Vice-President of the Birdsboro Steel Foundry and Machine Co. Also, Director of First National Bank (Reading) and Pennsylvania Trust Co., (Reading).



Member of American Institute of Mining Engineers. Member of Delta Phi Fraternity. Member of Philadelphia Club, Radnor Hunt Club, Wyomissing Club, Reading; Berkshire Country Club, Reading; Pennsylvania Society of New York.

Director of Birdsboro School Board.

Business address: Birdsboro, Pa.

Home address: Birdsboro, Pa.

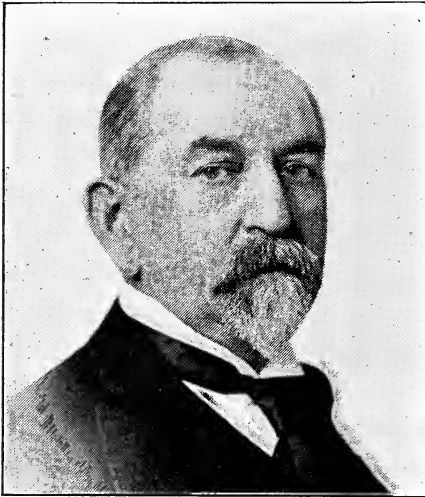
CHARLES FREDERICK BROOKER

PRESIDENT,

AMERICAN BRASS COMPANY

BORN in Litchfield, Conn., March 4, 1847, son of Martin Cook and Sarah Maria (Seymour) Brooker. Educated in public schools of Litchfield and Torrington, Conn.

President of the American Brass Co., The Coe Brass Mig. Co., and the Ansonia Land & Water Power Co.; Vice-President and Director, N. Y., N. H. & Hartford R. R. Co.; Director, U. S. Smelting, Refining and



Mining Co.; International Smelting and Refining Co.; The New England Navigation Co.; New York, Ontario & Western R. R. Co.; Berkshire Street Railroad Co.; Turner & Seymour Mfg. Co.; Torrington Water Co.; Derby Gas Co., and Director of a large number of banks.

Member of Railroad, Union League, and Drug and Chemical Clubs of New York. Member, Society of Colonial Wars, Sons of the American Revolution, New England Society of New York City, New York Chamber of Commerce.

Member of Connecticut House of Representatives, 1875; Senate, 1893; member of Republican State Central Committee for several years; and now Connecticut member of the Republican National Committee.

Business address: 99 John Street, New York.

Home address: Ansonia, Conn.

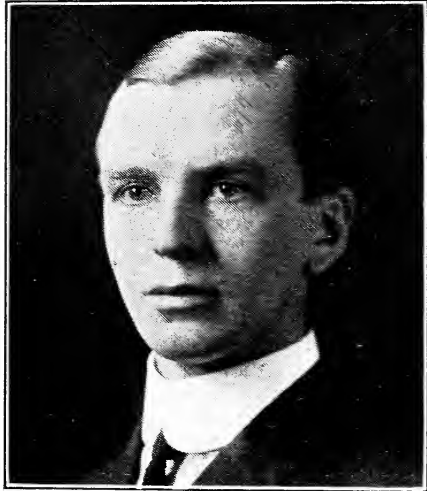
FAYETTE BROWN, JR.

TREASURER,

STEWART IRON COMPANY, LIMITED

BORN in Cleveland, Ohio, August 1, 1881, son of Harvey H. and Elizabeth Freeman (Hickox) Brown. Graduate of Yale University, B. A., 1904.

Entered the employ of the Stewart Iron Co., Limited, at its works in Sharon, Pa., in December, 1904. In August, 1906, was transferred to the Cleveland office of the company and in February, 1908, was appointed Assistant Secretary and Assistant Treasurer. Was elected a member of the Board of Managers of the company in February, 1910, and was elected Treasurer of the company in February, 1911; Vice-President and Director of The Brown Steamship Company, Director of The Sharon Railway Company, Director of the National Commercial Bank of Cleveland and of the Cleveland Trust Company.



Member of Union Club, Tavern Club, Country Club and Mayfield Club, Cleveland; Duquesne Club, Pittsburgh; Yale Club, New York; Graduates' Club, New Haven; Psi Upsilon Fraternity; Scroll and Key Society of Yale University.

Business address: 301 Perry-Payne Building, Cleveland, Ohio.

Home address: 2727 Euclid Avenue, Cleveland, Ohio

LOWELL HUNTINGTON BROWN

ASSISTANT TO THE PRESIDENT,
EMPIRE STEEL AND IRON COMPANY

BORN in Avondale, Cincinnati, Ohio, July 10, 1885, son of Archer and Adelaide (Hitchcock) Brown. After studying two years at the University of Michigan, went to Princeton University, graduating in 1907 with the degree of Litt.B. During the following year took a special graduate course at Columbia University.

Entered the employ of the Empire Steel and Iron



Co. at Catasauqua, Pa., in 1908, and in the following year was made Assistant Manager of that company's plant at Oxford, N. J. In the same year, was also appointed Assistant Secretary of the Empire Steel and Iron Company. Later was made Assistant to the President. Is a member of the Board of Directors

and member of the Executive Committee of the Red Rock Fuel Company, of West Virginia, also Director of the Black Mountain Coal Land Co. of Virginia.

Member of the American Institute of Mining Engineers. Member of the Princeton Club, New York City; University Cottage Club, Princeton, N. J. Member of the Psi Upsilon Fraternity (University of Michigan and Columbia University).

Business address: Oxford Furnace, N. J.

Home address: 56 Munn Ave., East Orange, N. J.

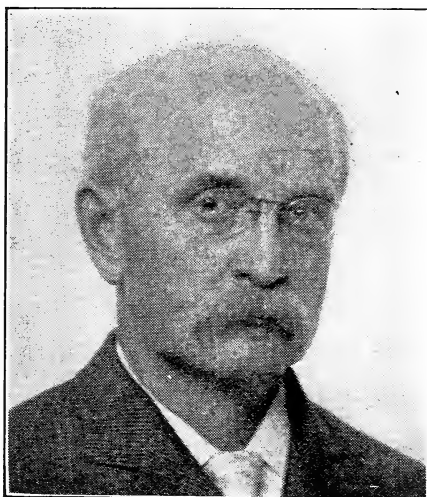
WILLIAM LISTON BROWN

PRESIDENT,

PICKANDS, BROWN AND COMPANY

BORN in St. Joseph, Mich., August 23, 1842, son of Hiram and Jane Reese Tilton (Liston) Brown. Educated in public and private schools of Chicago.

Served through the Civil War with the Chicago Mercantile Battery, Light Artillery. In 1865, clerk in pig-iron and coal business with A. B. Meeker and made partner in 1870. In 1883, organized Pickands, Brown & Co., and in 1890, with others, organized the Chicago Ship Building Co., which was later merged in the American Shipbuilding Co., of which Mr. Brown was President until 1908, and is now Chairman of the Board. Since 1885 has built, operated and controlled a number of coke furnaces, being connected with six now



in operation. President of the Federal Furnace Co.; Director of the Lackawanna Steel Co., and of a large number of furnace companies, banks and steamship lines.

Trustee of Northwestern University and the Chicago Thomas Orchestra. Member of Chicago, Commercial, Mid-Day, Caxton, Press, Onwentsia, and Glen View Clubs, Chicago; Union and Tavern Clubs, Cleveland, etc., etc.

Business address: Chicago, Ill.

Home address: 217 Dempster St., Evanston, Ill.

EUGENE JACKSON BUFFINGTON

PRESIDENT,

ILLINOIS STEEL COMPANY

BORN in Guyandotte, W. Va., March 14, 1863, son of James H. and Columbia (Nicholas) Buffington. Educated in public schools of Covington, Ky., and Cincinnati, O., and at Vanderbilt University, Nashville, Tenn.

In 1884, engaged in manufacture of wire nails at Covington, Ky., as Director and Treasurer of the American Wire Nail Co. In 1890, the Covington plant was



dismantled and a new rod, wire, nail and galvanizing plant erected at Anderson, Indiana. In 1898, became Treasurer, Director and Member of Executive Committee of the American Steel & Wire Co., with headquarters at Chicago. In January, 1899, was elected President and Director of the Illinois Steel Co. Also President

and Director of Indiana Steel Co., Gary Land Co., and Cundy Iron Co.; Director of Universal Portland Cement Co., H. C. Frick Coke Co., U. S. Coal & Coke Co., and Bunsen Coal Co.

Member of Chicago, Union League, Mid-Day Clubs of Chicago; the Glen View Golf Club and Evanston Golf Club. Member of Board of Trustees of Vanderbilt University.

Business address: 72 West Adams St., Chicago, Ill.

Home address: 1140 Forest Avenue, Evanston, Ill.

DONALD FAIRFAX BUSH

SENIOR PARTNER
CROCKER BROTHERS

BORN in Weston, Middlesex County, Mass., October 5, 1864, son of Frederick T. and Elizabeth (Du Blois) Bush. Graduated from the public schools of Boston, Mass.

Came to New York City at the early age of seventeen and soon afterwards secured a position with the well known banking firm of J. P. Morgan & Co., then known as Drexel, Morgan & Co. Remained with Drexel, Morgan & Co. until the fall of 1883, when he accepted an opening with the long established house of Crocker Brothers, metal and pig iron merchants, with whom he has been associated continuously since that time. For some years served the firm in the capacity of salesman, and worked up to the position of junior partner in 1898.



Upon the death of Mr. George A. Crocker in 1906, he became the senior partner of the firm, which is recognized as the representative of several of the largest producers of pig iron and ferro alloys in the world.

Member of the Metropolitan Club, Racquet and Tennis Club, Riding Club and the Down Town Association of New York City.

Business address: 99 John Street, New York City.
Home address: Rose Hill, Glen Cove, N. Y.

JOSEPH GREEN BUTLER, JR.

PRESIDENT,

BESSEMER PIG IRON ASSOCIATION

BORN in Temperance Furnace, Mercer Co., Pa., December 21, 1840, son of Joseph Green and Temperance (Orwig) Butler. Educated in the public schools of Niles, Ohio.

Entered the employ of James Ward & Co., Niles, O., and was successively clerk, 1853-56, bookkeeper, 1857-61, and office manager, 1861-63; in period 1863-66, was



Youngstown Agent of Hale and Ayer, of Chicago; 1866-78, Managing Partner of Girard Iron Co.; 1878-1911, General Manager of the Brier Hill Iron and Coal Co. Also Vice-President of the Ohio Steel Co. until that company was acquired by the National Steel Company; Director, Youngstown Sheet & Tube Co., Chair-

man of Board of Directors, Bessemer Limestone Company, and officer or director in a number of other companies. President, Youngstown Chamber of Commerce.

Member of the Youngstown Board of Health, six years; member, Youngstown City Council, three terms; delegate to Republican National Convention, 1900. President, Ohio State Society Sons of the American Revolution. President, Mahoning Valley Historical Society.

Business address: Youngstown, Ohio.

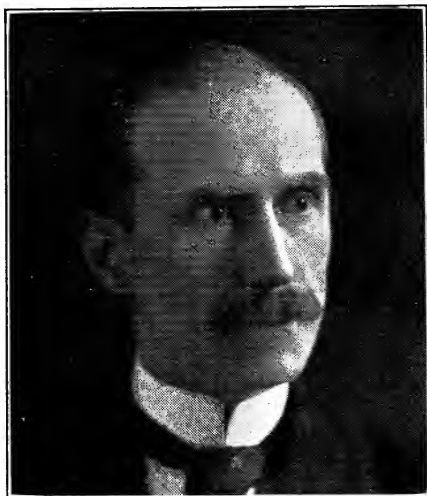
Home address: Youngstown, Ohio.

JAMES JOHN CAMPBELL

AUDITOR AND ASSISTANT SECRETARY,
CARNEGIE STEEL COMPANY

BORN in Washington, D. C., December 6, 1865, son of Joseph and Elizabeth J. (Gamble) Campbell. Educated in the public schools of Washington, D. C.

After working as clerk in grocery store, auditor's office of the Penn. Company and for a planing mill and lumber company, entered the service of the Carnegie Steel Co., (then Carnegie Bros. and Co., Limited, and Carnegie, Phipps and Co., Limited) on February 1, 1886, as clerk and stenographer to the Purchasing Agent; in 1888, was transferred to the Accounting Department; was made Assistant Auditor in 1895 and was made a junior partner, Auditor and Assistant Secretary in 1900. After the United States Steel Corporation



acquired the Carnegie Steel Co., continued to hold the positions of Auditor and Assistant Secretary of the last named company and similar positions in several allied subsidiary companies. Also Director of South Side Trust Co., Pittsburgh, Pa.

Member of Duquesne Club, Pittsburgh and Oakmont Country Club, Oakmont, Pa. Director of Oakmont Public School District.

Business address: Carnegie Building, Pittsburgh, Pa.

Home address: Oakmont, Allegheny Co., Pa.

CLYDE MITCHELL CARR

PRESIDENT,

JOSEPH T. RYERSON & SON

BORN in Illinois in 1869 of Virginia ancestry, son of Richard Baxter and Margaret (Mitchell) Carr. Prepared for Princeton at the Lake Forest Academy; attended Northwestern University two years.

After leaving college, engaged in the iron, steel and machinery business for two years with W. S. Mallory & Co., Chicago, and for the past twenty-one years with



Joseph T. Ryerson & Son, Chicago. Admitted to firm in 1901, elected Vice-President, 1904, and in 1911, elected President of the company. Also President of the Lennox Machine Co., Marshalltown, Ia.; Director of Gisholt Machine Co., Madison, Wis., American Glyco Metal Co., Corn Exchange National Bank of Chicago,

and Chicago Great Western R. R. Co.

Is a Trustee of Lake Forest University; member of the Commercial, Chicago, Onwentsia, University, Cliff Dwellers, Princeton, Mid-Day and Saddle and Cycle Clubs. Trustee of the Art Institute of Chicago, Orchestral Association of Chicago; Chicago City Plan Commission; Chicago Bureau of Public Efficiency.

Business address: Chicago, Ill.

Home address: Lake Forest, Ill.

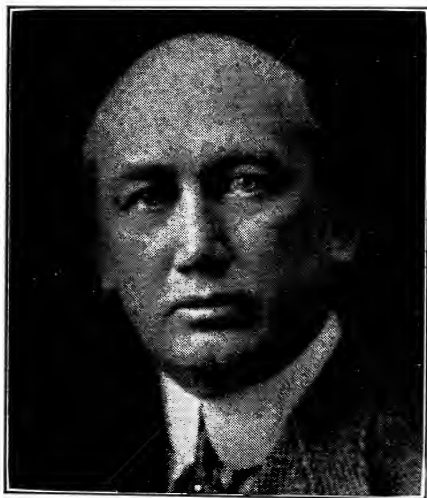
In Winter: 1130 Lake Shore Drive, Chicago, Ill.

JOHN BRADLEY CARSE

MEMBER OF ADVISORY COMMITTEE,
UNITED STATES STEEL CORPORATION

BORN in Jeffersonville, Indiana, September 10, 1864, son of Thomas and Matilda (Bradley) Carse. Educated in the public schools of Chicago; Morgan Park Military Academy; and graduate of Williams College, A. B., 1886.

In business in England, 1895-1897. Vice-President, Treasurer and Director of Carse Bros. Co., 1892-1903; Secretary, Treasurer and Director, Thomas Kane & Co., 1897-1903; Vice-President, Treasurer and Director, Manufacturers Stove Repair Co., 1898-1903. In 1903, severed his connection with his various Chicago interests, and became a member of the Advisory Committee, United States Steel Corporation in New York City.



Member, American Society of Mechanical Engineers, American Academy of Political and Social Science, National Geographic Society, Illinois Society of N. Y.

Member of University and Railroad Clubs of New York; St. Andrews Golf Club; Chicago University Club, Chicago Athletic Club, Chicago Yacht Club, Delta Kappa Epsilon Fraternity.

Business address: 71 Broadway, New York.

Home address: Riverdale-on-Hudson, New York.

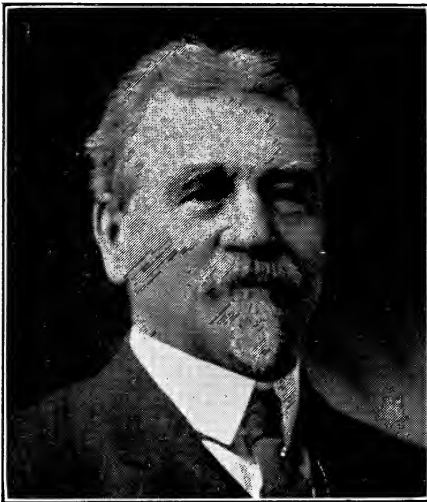
HIRAM SANBORN CHAMBERLAIN

PRESIDENT,

ROANE IRON COMPANY

BORN in Franklin, Portage Co., Ohio, August 6, 1835, son of Leander and Susannah (Willey) Chamberlain. Educated in Hiram College, Hiram, O., 1858-61. M. A., 1898 (Hiram Coll.); LL.D., 1910 (Univ. of Chattanooga).

Served in the Civil War, 1861-1865, and was mustered out as Captain and Assistant Quartermaster. In 1869, he organized the Knoxville Iron Co., and in 1868, with



Gen. John T. Wilder, organized the Roane Iron Co., of which he has been President for the last thirty-one years. In 1882, with Edward Doud, organized the Citico Furnace Co., and was elected President, which position he still holds. Has been connected with several coal and iron mining companies in the South.

For many years President of School Board, Chattanooga, Tenn.; now President of Board of Trustees, University of Chattanooga; for past twenty-two years President of the Associated Charities, Chattanooga; one of the founders and Trustees of Erlanger Hospital. Member of American Institute of Mining Engineers, National Association of Manufacturers, Grand Army of the Republic, Ohio Commandery of the Loyal Legion.

Business address: Chattanooga, Tenn.

Home address: 237 E. Terrace St., Chattanooga, Tenn.

ALVAH STONE CHISHOLM

ASSISTANT TO THE PRESIDENT,
AMERICAN STEEL & WIRE COMPANY

BORN in Chicago, Ill., November 13, 1871, son of William and Mary H. (Stone) Chisholm. Educated in the public schools of Cleveland, Ohio, and graduate of Yale, A. B., 1893.

In 1894, entered the employ of the Cleveland Rolling Mill Co., and was promoted through various grades in this company, and after its absorption by the American Steel and Wire Co., in the latter company to his present position of Assistant to the President. Also Director of Bank of Commerce, Citizens Savings & Trust Co., Standard Sewing Machine Co., Kelley Island Lime & Transport Co., American Multigraph Co., Cleveland and Buffalo Transit Co., Cleveland Builders' Supply Co., American Mining Co. Vice-President and Director, Newburgh & South Shore R. R. Co., and Pennsylvania & Lake Erie Dock Co.



Member of Union, Tavern, Roadside, Athletic and Country Clubs of Cleveland, Ohio. Trustee of the University School, the Young Women's Christian Association and the Babies' Dispensary and Hospital, Cleveland.

Business address: Cleveland, O.

Home address: Lake Shore Boulevard, Cleveland, O.

WALTER HICKS CLINGERMAN

GENERAL SUPERINTENDENT,
H. C. FRICK COKE COMPANY

BORN in Altoona, Pa., December 2, 1868, son of John and Rebecca (Hicks) Clingerman. Educated in the public schools of Altoona, Pa.

In June, 1885, entered the machine shops of the Pennsylvania Railroad Co., at Altoona, as an apprentice; in December, 1889, was transferred to the office of the Superintendent of Motive Power as draftsman and



in charge of construction work. In June, 1895, granted leave of absence in order to plan and superintend the construction of Car Shops for the H. C. Frick Coke Co., and put car repairs on a piece work basis, returning to the railroad in January, 1896. In September, 1897, appointed General Foreman of the Everson Car

Shops, H. C. Frick Coke Co.; in April, 1898, was appointed Assistant General Superintendent of the H. C. Frick Coke Co., and in February, 1904, was appointed General Superintendent of the company, which position he now holds. Director of the Madeira-Hill-Clark Coal Co.

Director of the Memorial Hospital, Mt. Pleasant, Pa.

Business address: H. C. Frick Coke Co., Scottdale, Pa.

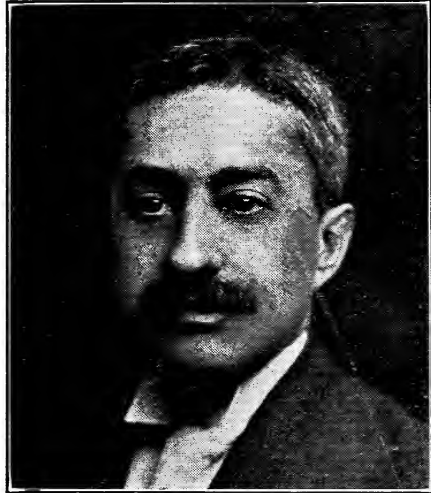
Home address: Scottdale, Pa.

CHARLES CHILD CLUFF

MANAGER OF SALES,
CARNEGIE STEEL COMPANY, ETC.

BORN in Boston, Mass., May 22, 1863, son of Matthew J. and Charlotte (Child) Cluff. Educated in public and private schools of Brooklyn, N. Y.

Has been connected with the steel and wire business practically throughout his business career. For about twelve years, 1880 to 1892, was connected with the Iowa Barb Wire Co., of New York and Allentown, Pa. (now the Allentown Works of the American Steel and Wire Co.) and was promoted through various grades, during the last two years being Secretary of the company. In 1895, became General Eastern Agent of the Illinois Steel Co., and upon the formation of the United States Steel Corporation in 1901, became Assistant Manager of Sales in the New York District for both the Carnegie Steel Co. and the Illinois Steel Co., and later for the Tennessee Coal, Iron & R. R. Co. In September 1910, was promoted to the post of Manager of Sales.



Member of Railroad Club, Lawyers' Club, Engineers' Club and Economic Club of New York City, and Long Island Automobile Club of Brooklyn, N. Y.

Business address: 30 Church Street, New York.

Home address: 278 Gates Avenue, Brooklyn, N. Y.

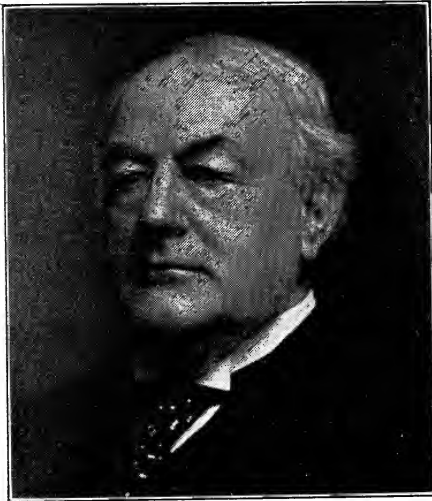
LUCIUS ELISHA COCHRAN

PRESIDENT,

YOUNGSTOWN IRON & STEEL COMPANY

BORN in Delaware Co., Ohio, June 12, 1842, son of Robert and Nancy (Hummason) Cochran. Educated in the public schools of Lawrence Co., Pa., and at Duff's College, Pittsburgh, Pa.

Moved to Youngstown, Ohio, in 1862, and entered the employ of Goble, McClelland & Co., and later the firm of Andrews & Hitchcock. Later became a member



of the firm of Andrews Bros. & Co., and in 1883, was made President, Treasurer and General Manager of the Andrews Brothers Co. Organizer and director of Western Steel Co., St. Louis, Mo.; Ohio Steel Co., Youngstown; Youngstown Car Manufacturing Co., and Youngstown Bridge Co. Is President of Youngs-

town Iron and Steel Co., Youngstown Pressed Steel Co., Mahoning Valley Water Co., Edwin Bell Co., G. M. McKelvey Co.; Vice-President of Commercial National Bank; director of Standard Oil Cloth Co., Youngstown Wagon and Carriage Co., Tod House Co.

Member, Golf, Youngstown, Elk Clubs, Youngstown; Duquesne Club, Pittsburgh; Union Club, Cleveland; Ohio Society, New York; thirty-second degree Mason.

Business address: Youngstown, Ohio.

Home address: Youngstown, Ohio.

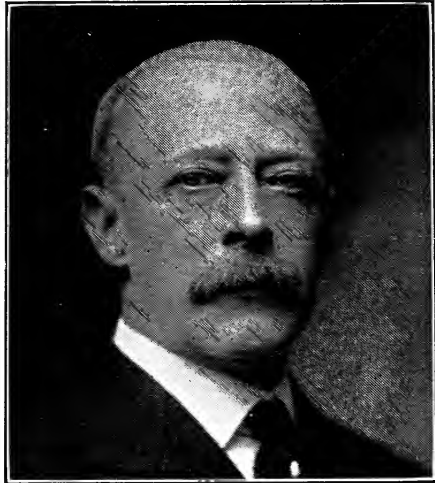
EDGAR SCUDDER COOK

PRESIDENT AND GENERAL MANAGER,
WARWICK IRON AND STEEL COMPANY

BORN in Philadelphia, Pa., August 28, 1851, son of Jesse M. and Sarah (Scudder) Cook. Educated in the public schools of Philadelphia, Pa., and graduate of the Philadelphia Central High School, A. B., 1869 with first honors.

In 1871, entered the blast furnace business as clerk at the Monocasy Blast Furnace, Berks County, Pa., owned and operated by Wright, Cook & Co., pig iron manufacturers. In 1873,

was appointed Manager of these works. In November, 1877, became Manager of the blast furnace of the Warwick Iron Co., Pottstown, Pa., and was elected President and General Manager of the company in February, 1890. In June 1899, organized the Warwick Iron and Steel Co., and has been



President and General Manager of the company ever since. Mr. Cook was one of the pioneers in replacing "Rule of Thumb" management of blast furnaces by the application of "Scientific Methods". He built and operated at the Monocasy Furnace the first blast furnace chemical laboratory in the Schuylkill Valley.

Member, American Institute of Mining Engineers and American Society for Testing Materials.

Business address: Pottstown, Pa.

Home address: Pottstown, Pa.

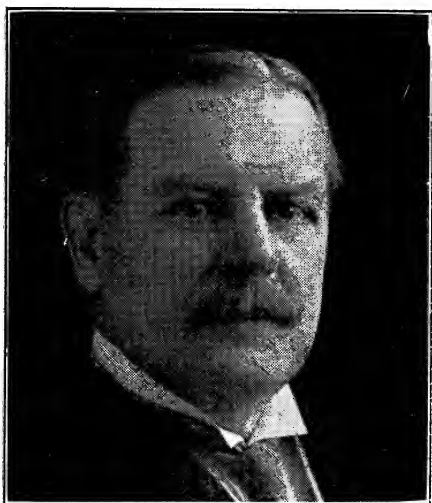
DANIEL COOLIDGE

PRESIDENT,

THE LORAIN STEEL COMPANY

BORN in Boston, Mass., December 8, 1851, son of Thatcher and Martha T. (Anderton) Coolidge. Educated in the public schools of Boston, Mass.; graduate of Boston English High School, 1868.

Was Civil Engineer in Boston from 1868 to 1882. Was Superintendent of South Boston Street Railway Company from 1882 to 1887. Came to the Johnson



Company, Johnstown, Pa. in December, 1887, after the consolidation of all the Boston Railways into the West End Railway Company. Was elected Vice-President and Director of The Lorain Steel Company, (formerly The Johnson Company) in 1889 and was elected President in 1899. Is also President and Director of the Johns-

town and Stony Creek Railroad Company.

Member of the Engineers' Club, New York; Duquesne Club, Pittsburgh, and Art Club, Philadelphia.

Business address: Johnstown, Pa.

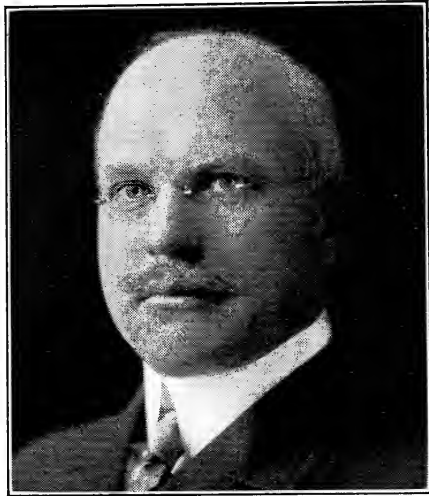
Home address: 2nd Ave. and Erie St., Westmont, Johnstown, Pa.

WILLIAM ELLIS COREY

DIRECTOR,
UNITED STATES STEEL CORPORATION

BORN in Pennsylvania in 1866, son of Alfred A. and Adaline (Fritzius) Corey. Educated in the public schools.

Entered the chemical laboratory of the Edgar Thomson Works in 1882, at the age of sixteen. In 1887, he was appointed Superintendent of the Plate Mill at the Edgar Thomson Works of Carnegie Brothers & Co. Was subsequently promoted through various grades and for many years followed Mr. Charles M. Schwab in line of promotion. He succeeded Mr. Schwab as President of the Carnegie Steel Company and in 1903, as President and Director of the United States Steel Corporation. Resigned as President of the corporation early in 1911, but remains as a Director.



Director of Carnegie Steel Co., Federal Steel Co., Illinois Steel Co., American Steel & Wire Co., National Tube Co., Shelby Steel Tube Co., U. S. Steel Products Co., Duluth & Iron Range R. R. Co., E. J. & E. R. R. Co., etc.

Inventor of the Carnegie reformed armor plate.

Member of the American Institute of Mining Engineers. Member of the Metropolitan Club and Ardsley Club, New York.

Business address: 111 Broadway, New York.

HARRY COULBY

PRESIDENT AND GENERAL MANAGER,
PITTSBURGH STEAMSHIP COMPANY

BORN in England, January 1, 1865, son of Thomas and Jane (Bugge) Coulby. Educated in the public schools in England.

In 1883, came to America and obtained employment in the general offices of the Lake Shore & Michigan Southern Railroad at Cleveland, Ohio, where he stayed only a short time, having an offer from the late Colonel



John Hay to act as his private secretary during the time he was finishing his "Life of Lincoln." In 1886, he became connected with the firm of Pickands, Mather and Company, and remained with the company for eighteen years, 1886-1904. Began in a subordinate position and was promoted through various grades until, in

1900, he was admitted to partnership. In 1904, he discontinued active work with Pickands, Mather & Co. and accepted the position of President of the Pittsburgh Steamship Company, a subsidiary company of the United States Steel Corporation.

Member of the Union Club, Tavern Club and Country Club, Cleveland; Duquesne Club, Pittsburgh; Chicago Club, Chicago, and Kitchigammi Club, Duluth.

Business address: Rockefeller Bldg., Cleveland, O.
Home address: Wickliffe, Lake County, O.

GEORGE GORDON CRAWFORD

PRESIDENT,

TENNESSEE COAL, IRON AND RAILROAD COMPANY

BORN in Madison, Georgia, August 24, 1869, son of Dr. George Gilmore and Margaret Reed (Howard) Crawford. Graduate of Georgia School of Technology, B.S., 1890; at University of Tubingen, 1891-92., Post Graduate Course in Chemistry.

In 1892, employed as draftsman with the Sloss Iron and Steel Company, Birmingham, Ala. In 1893, became

Chemist at the Edgar Thomson Works, Carnegie Steel Company, Braddock, Pa.; was subsequently Assistant Superintendent of Blast Furnaces, Edgar Thomson Works. In 1897, was appointed Superintendent of Blast Furnaces and Steel Works, McKeesport, Pa. In 1899, made Superintendent of Blast Furnaces at the Edgar



Thomson Works, Carnegie Steel Company. In 1901, became Manager of the tube works and plants of the National Tube Company, McKeesport, Pa. Since 1907, President of the Tennessee Coal, Iron and Railroad Co.

Member of American Institute of Mining Engineers; Southern, Country, and Athletic Clubs, Birmingham, Ala.; Pittsburgh, Duquesne, University, and Pittsburgh Golf Clubs, Pittsburgh, Pa.; Engineers Club, New York; etc.

Business address: Birmingham, Ala.

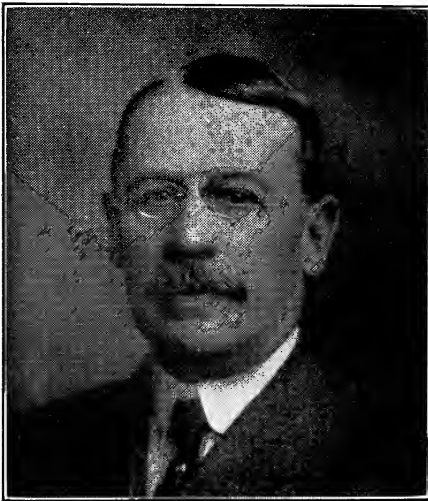
Home address: Birmingham, Ala.

WILLIAM D. CRAWFORD

VICE-PRESIDENT AND GENERAL MANAGER,
LA BELLE IRON WORKS

BORN in Pittsburgh, Pa., March 1, 1860, son of Albert and Mary (La Fevre) Crawford. Educated in the public schools of Pittsburgh, Pa.

Entered the employ of the Shoenberger Steel Co., in 1880, and was connected with this company for nineteen years, 1880 to 1899, during which time he served in various capacities, being promoted finally to the position of



General Manager of the company. In 1900, left the Shoenberger Steel Company and from 1900 to 1903, was General Manager of the Tidewater Steel Co., Chester, Pa., manufacturers of pig iron and open hearth steel boiler, ship and tank plates and skelp. In 1904, became associated with the La Belle Iron Works as

Vice-President and General Manager of that company which position he now holds.

Member of Duquesne Club, Union Club, Americus Club and Pittsburgh Athletic Association, Pittsburgh; Fort Henry Club, Wheeling, West Virginia. Member of Philadelphia Athletic Association, Philadelphia; and of all the Masonic bodies.

Business address: Steubenville, O.

Home address: 341 So. Fourth St., Steubenville, O.

OTIS H. CUTLER

PRESIDENT,

AMERICAN BRAKE SHOE AND FOUNDRY COMPANY

BORN in New York City, May 15, 1866, son of Captain Otis N. and Mary C. F. (Tibbetts) Cutler. Educated in the public schools of Suffern, Rockland Co., N. Y., and at Rockland College.

On his father's death in 1883, removed to Washington, D. C., and became private secretary to Senator Frye, of Maine and later clerk of the Commerce Committee, United States Senate. In 1892, returned to Suffern, N. Y., and was

elected for three successive terms a member of the New York Legislature. Declined renomination to accept position with the Ramapo Iron Works, Hillburn, N. Y. Subsequently organized the Ramapo Foundry Co., of Mahwah, N. J., which



was soon after merged in the American Brake Shoe & Foundry Co. Mr. Cutler became President of the latter company in 1903. President of American Malleable Co., Whritner Lumber Co.; Chairman, Executive Committee, Hale & Kilburn Co.; Director of Railway Steel Spring Co., Baldwin Locomotive Co., and other companies.

Member of Union League, Engineers, Republican and Railroad Clubs, New York, and several country clubs.

Business address: 30 Church St., New York.

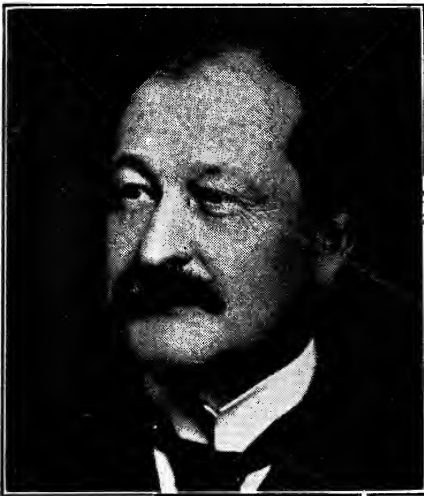
Home address: Suffern, N. Y.

FRED HARRIS DANIELS

DIRECTOR AND CHIEF ENGINEER,
AMERICAN STEEL AND WIRE COMPANY

BORN in Hanover Center, New Hampshire, June 16, 1853, son of William Pomeroy and H. Ann (Stark) Daniels. Educated in public schools, Worcester, Mass.; Worcester Polytechnic Institute, B. S. 1873, and Lafayette College, Easton, Pa.

In 1873, entered employ of Washburn and Moen Manufacturing Co., Worcester, Mass.; in 1880, became



Superintendent of Construction, in 1887, Assistant General Superintendent and in 1888, General Superintendent of the Washburn and Moen properties; in 1899, when these properties were acquired by the American Steel and Wire Co., became Chief Engineer and Director. Member of Board of Engineers of

U. S. Steel Corpn., etc. Has taken out 151 patents, the most important on wire rods and wire; built first multiple continuous rod mill; in 1900, received a Gold Medal, Paris Exposition; in 1910, received a Decoration from King Gustaf V. of Sweden.

Member, Amer. Soc. Mech. Engineers; Amer. Ins. Min. Engineers; Amer. Soc. Testing Materials and Iron and Steel Institute of Great Britain.

Business address: 94 Grove Street, Worcester, Mass.

Home address: 214 Salisbury St., Worcester, Mass.

STEWART ARCHIBALD DAVIS

VICE-PRESIDENT,

AMERICAN SHEET & TIN PLATE COMPANY

BORN in Blairsville, Indiana Co., Pa., July 21, 1867, son of Stewart and Amanda J. (De Vinney) Davis. Educated in the public schools of Blairsville, Pa.

Began his business career as a clerk in the employ of the Pennsylvania Railroad, serving four years, 1884-1888; then entered the steel business as clerk in the Apollo Iron & Steel Co., Apollo, Pa., and continued with

the company and its successors, the American Sheet Steel Co., and American Sheet and Tin Plate Co., ever since. Was promoted through various grades at the Apollo works to the position of Mill Superintendent. At formation of American Sheet Steel Co., was made District Manager. Since the consolidation of the Sheet



and Tin Plate companies of the U. S. Steel Corporation, has been successively Assistant to 1st Vice-President, 2nd Vice-President and 1st Vice-President, which position he now holds.

Member of Engineers' Society of Western Pennsylvania; American Institute of Mining Engineers; the American Electro-chemical Society. Member of Duquesne Club, Pittsburgh.

Business address: Frick Building, Pittsburgh, Pa.

Home address: Bellefield Dwellings, Pittsburgh, Pa.

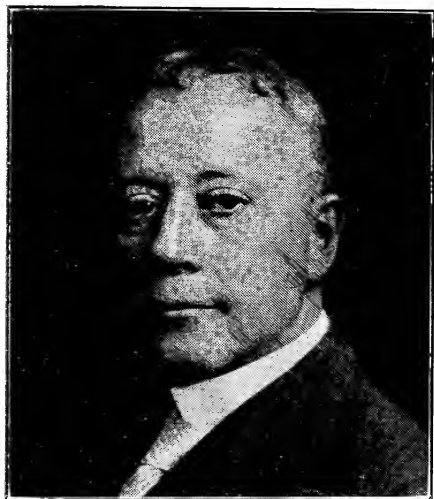
CHARLES DEERING

CHAIRMAN,

INTERNATIONAL HARVESTER COMPANY

BORN in Paris, Me., July 31, 1852, son of William and Abby (Barbour) Deering. Graduate of the United States Naval Academy, Annapolis, Md., Class of 1873.

Remained in the U. S. Navy down to 1881, serving as midshipman, ensign and master. Resigned in 1881 in order to engage in business with his father, William Deering, at first in the firm of William Deering & Co.,



and later under the name of the Deering Harvester Company. Was prominent in the management of the last named company and at the formation of the International Harvester Company in 1902, was elected a Director of the company. Now Chairman of the Board of Directors of the International Harvester

Company and Director of the First National Bank of Chicago.

Member of the Chicago Club, Chicago, and several clubs in New York City.

Business address: 606 So. Michigan Ave., Chicago, Ill.

Home address: 5 West 65th St., New York City.

JAMES H. DEMPSEY

ATTORNEY-AT-LAW

BORN in Shelby, Ohio, March 29, 1859, son of John and Martha C. (Davies) Dempsey. Graduate of Kenyon College, A. B., 1882.

Engaged in the practice of law, first as member of the firm of Estep, Dickey & Squire, and since January, 1890, of the firm of Squire, Sanders & Dempsey. President and Director of the Factory Site Co., and the Mogul Mining Co.; Vice-President and Director, Toledo and South Eastern Railway Co.; Director of the Grasselli Chemical Co., the Glidden Varnish Co., the Webb C. Ball Watch Co., the Kelley Island Cable Co., and the Ohio and Western Lime Co.



Member of Union, University, Tavern, Country, Chagrin Valley Hunt, and Cleveland Yacht Clubs of Cleveland, Ohio; University Club of New York. Delta Kappa Epsilon Fraternity. Trustee of Kenyon College, Gambier, Ohio; University School, Cleveland; East End School, Cleveland; Lake View Cemetery Association, Cleveland.

Business address: 808 Perry-Payne Bldg., Cleveland, O.

Home address: 1858 East 65th Street, Cleveland, O.

In Summer: Lake Shore Boulevard, Bratenahl, O.

THOMAS DEVLIN

PRESIDENT,

THOMAS DEVLIN MANUFACTURING COMPANY

BORN in Ballyneal, County Derry, Ireland, March 30, 1838, son of William and Mary (Sherry) Devlin. Educated in Ireland and at public and private night schools in Philadelphia, Pa.

Began as office boy with Thomas R. Wood & Co., Malleable Iron Works, Philadelphia, August 4, 1854. Continued with this firm and its successor, in various capacities.



On January 1, 1866, with two other employes, was given an interest in the business and in 1871, these three purchased the business and continued under name of Carr, Crawley & Devlin. In 1880, withdrew from this firm and with Louis J. McGrath, built new plant and organized the Thomas Devlin Mfg. Co. Also

President, National Specialty Manufacturing Co.; Director, Peoples' National Fire Ins. Co., Bank of Commerce; Beneficial Savings Fund.

President, Philadelphia Foundrymen's Assn; Member, National Assn. of Foundrymen, National Assn. of Manufacturers, Amer. Foundrymen's Assn., Hardware Merchant's & Manufacturer's Assn. Director, Chamber of Commerce and Manufacturers' Club, Philadelphia.

Business address: Philadelphia, Pa.

Home address: 1615 N. 10th St., Philadelphia, Pa.

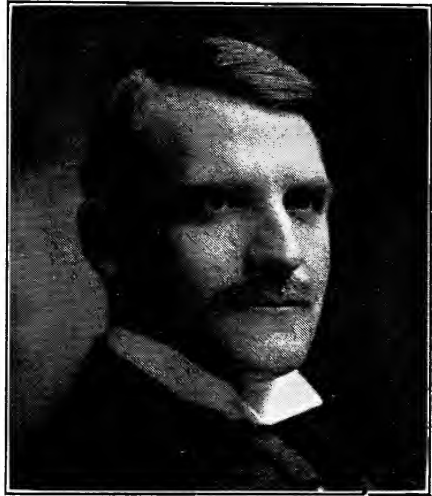
WILLIAM BROWN DICKSON

CAPITALIST

BORN in Pittsburgh, Pa., November 6, 1865, son of John and Mary A. (McConnel) Dickson. Educated in the public schools of Pittsburgh, Pa.

Commenced work at an early age and, in 1881, secured employment at the Homestead Steel Works which had just been built and placed in operation. After several years passed at manual labor in the mills, was transferred to the office, acting

at first in a clerical capacity and subsequently receiving rapid promotion through various grades up to that of Assistant to President, and Managing Director of the Carnegie Steel Co. Became a Junior Partner in the Carnegie Steel Co., Limited, in 1899. On the formation of the United States



Steel Corporation in 1901, accompanied Mr. C. M. Schwab to New York as Assistant to the President of the United States Steel Corporation and later was elected a Vice-President of the Corporation, which position he held until May 1, 1911, when he resigned in order to retire from active business.

Home address: Llewellyn Road, Montclair, N. J.

ALVA CLYMER DINKEY

PRESIDENT,
CARNEGIE STEEL COMPANY

BORN in Weatherly, Pa., February 20, 1866, son of Reuben and Mary Elizabeth (Hamm) Dinkey. Educated in public schools of Weatherly and Braddock, Pa.

Entered the Carnegie service as water boy at Edgar Thomson Steel Works, May 21, 1879; employed as telegraph operator, Edgar Thomson Steel Works, 1885; machinist at Pittsburgh Locomotive Works, Allegheny,



1885-1888; expert machinist for McTighe Electric Co., Pittsburgh, 1889; Secretary to Superintendent, Homestead Steel Works, Carnegie Steel Co. 1889-1893; Electrician, Homestead Steel Works, 1893-1898; Superintendent of Electric Light & Power Plant, 1898-99; Assistant to General Superintendent, 1899-1901;

General Superintendent, 1901-1903. On August 1, 1903, was elected President of the Carnegie Steel Co.

Member, Amer. Soc. Elec. Engineers, Amer. Soc. Mechanical Engineers, Amer. Inst. of Mining Engineers, Engineers' Society of Western, Pa. Member of Engineers' Club, New York; The Pilgrims; Duquesne, Country and Union Clubs, Pittsburgh. Trustee of Carnegie Institute and Carnegie Hero Fund Commission.

Business address: Carnegie Bldg., Pittsburgh, Pa.

Home address: 5044 Ellsworth Ave., Pittsburgh, Pa.

PHILIP SIDNEY DYER

VICE-PRESIDENT AND TREASURER,
AMERICAN HORSE SHOE COMPANY

BORN in Calais, Me., January 14, 1857, son of George W. and Mary E. (Kelley) Dyer. Educated in the public schools of Calais, Me., and Washington, D. C.

In 1879, was with Thomas A. Edison as an assistant in his laboratory at Menlo Park, New Jersey, and gave his attention to the early development of the Edison electric lamp. In 1882, assisted in the establishment of

the lamp works at Harrison, New Jersey, where he remained for several years. He then went to Europe as the representative of all the Edison manufacturing companies and remained there until 1892, when he returned to this country and with other gentlemen, organized the American Horse Shoe Company in 1895 and has been identified with the



company ever since. Also a Director of the Sweets Steel Company, Williamsport, Pa.; Canadian Shovel and Tool Company, Hamilton, Ontario and the Chipman-Holton Knitting Company, Hamilton, Ontario.

Member of the Engineers' Club, New York Athletic Club and Railroad Club, New York; Pomfret Club, Easton, Pa.

Business address: Phillipsburg, N. J.

Home address: Mt. Arlington, N. J.

HOWARD NICHOLAS EAVENSON

CHIEF ENGINEER,

UNITED STATES COAL AND COKE COMPANY

BORN in Philadelphia, Pa., July 15, 1873, son of Alben T. and Susan (Bean) Eavenson. Educated in public and private schools of Philadelphia, Pa.; graduate, Swarthmore College, B. S., 1892; C. E., 1897.

From 1892 to 1894, draftsman and transit man for Va. & Tenn. Coal and Iron Co., Wise Co., Va. In 1894-97, connected with New York Ship Canal and U. S. Lake Survey. From 1897 to



1900, Draftsman and Division Engineer, H. C. Frick Coke Co.; February to June, 1900, Division Engineer, Pittsburgh Coal Co.; 1900-1902, Chief Engineer, Continental Coke Works, Uniontown, Pa. In 1902, Assistant Chief Engineer, H. C. Frick Coke Co.; October, 1902, to present time, Chief

Engineer, United States Coal and Coke Co. Director, Pennsylvania Coal & Mining Co., Central Pocahontas Coal Co., Anawalt Supply Co., Crystal Block Coal and Coke Co., and Gary National Bank.

Member, Amer. Soc. Civil Engineers; Amer. Inst. Mining Engineers; Appalachian Engineering Society; Coal Mining Institute of America; American Academy of Political and Social Science; Delta Upsilon.

Business address: Gary, McDowell Co., West Va.

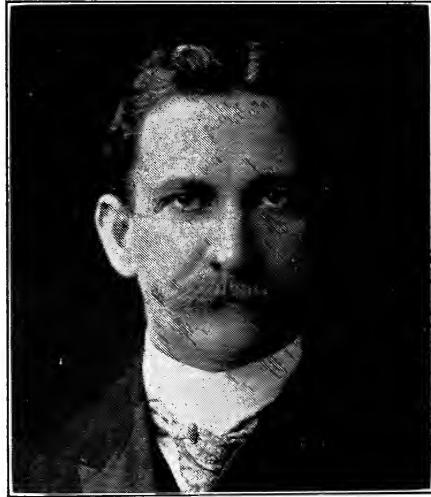
Home address: Gary, McDowell Co., West Va.

RICHARD HATHAWAY EDMONDS

FOUNDER AND EDITOR,
THE MANUFACTURERS RECORD

BORN in Norfolk, Va., October 11, 1857, son of Rev. Richard Henry and Mary E. Edmonds. Educated in the public schools of Baltimore, Md.

In 1876, entered the service of the Journal of Commerce, Baltimore, and in 1882, established the Manufacturers Record, of which he has since been editor. Has published numerous pamphlets and addresses bearing on Southern conditions. The Manufacturers Record devotes its columns to Southern upbuilding, mining, lumbering, railroads, commerce and manufacturing, it also circulates many pamphlets and booklets relating to Southern progress and acts as a Bureau of Information on all questions relating to the growth of



industry and commerce in the South. Mr. Edmonds was for some years member of the Executive Committee of the Alabama Consolidated Coal and Iron Co., and the International Trust Co., of Baltimore. Now Director of Baltimore Trust Co.

Member of American Association for the Advancement of Science; American Academy of Political and Social Science and Southern Society of New York City.

Business address: Baltimore, Md.

Home address: 323 Roland Ave., Baltimore, Md.

JOSEPH SKETCHLEY ELVERSON

TREASURER,

LEHIGH CAR, WHEEL AND AXLE WORKS

BORN in Camden, N. J., January 9, 1866, son of Joseph and Matilda (Morgan) Elverson. Educated in the public schools of Camden, N. J.; preparatory schools, Philadelphia, Pa.; and graduate of the University of Pennsylvania, of B. S., 1887 and E. M., 1888.



Since 1890, connected with the iron and steel industry in the Lehigh Valley District of Eastern Pennsylvania. From 1890 to 1893, was Mining Engineer for the Crane Iron Works, Catasauqua, Pa. and during the period 1899-1900, was Division Superintendent of the Empire Steel & Iron Company at Oxford, and opened up their mine workings in that district. Later became connected with the Lehigh Car, Wheel & Axle Works. Now Treasurer and Director of the Lehigh Car, Wheel and Axle Works; Director of the Lehigh Foundry Company, the Empire Steel and Iron Company, and the Allentown Portland Cement Company.

Member of the University Club of Philadelphia, Pa.; the Engineers Club of New York City, and the Catasauqua Club of Catasauqua, Pa. Member of the Psi Upsilon Fraternity (University of Pennsylvania).

Business address: Catasauqua, Pa.

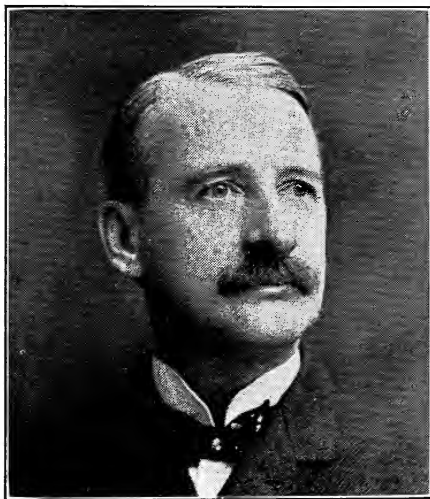
Home address: Catasauqua, Pa.

MASON EVANS

TREASURER,
YOUNGSTOWN IRON & STEEL COMPANY

BORN in Philadelphia, Pa., November 27, 1849, son of Owen and Sarah Mason (Roe) Evans. Educated in private schools of Philadelphia, graduate of Law Department, University of Pennsylvania, 1869.

Practiced law until compelled to give up practice on account of failing health. Took up railroad engineering. In 1883, was elected Cashier of Commercial National Bank (Youngstown) and in 1894, became interested in the Youngstown Iron and Steel Roofing Co., (now Youngstown Iron and Steel Co.) and has been its Treasurer since organization. Now President, Commercial National Bank, (Youngstown), President of Youngstown Clearing House, Treasurer of The Edwin Bell Co., and also of the Mahoning Valley Water Company.



Member, American Academy of Political and Social Science. Member of Youngstown, Rayen, Elks and Automobile Clubs, Youngstown; Union Club, Cleveland; and Mahoning Golf Club. Masonic Fraternity and Elks. Member of Board of Education, Youngstown, (23 years). Director of Visiting Nurse Association, Trustee of Library Association.

Business address: 21 W. Federal St., Youngstown, O.

Home address: 215 Lincoln Ave., Youngstown, O.

B. F. FACKENTHAL, JR.

PRESIDENT,
THOMAS IRON COMPANY

BORN in Doylestown, Pa., June 2, 1851, son of B. F. and Catherine (Dennis) Fackenthal. Educated in the public schools of Durham, Bucks Co., Pa. Special student in metallurgy and chemistry, Lafayette College, 1874-75. Degree A. M. 1897; Sc. D., 1911, (Lafayette).

Was Superintendent, Durham Iron Works, Riegelsville, Pa., owned by Cooper Hewitt & Co., and later General Manager of all other

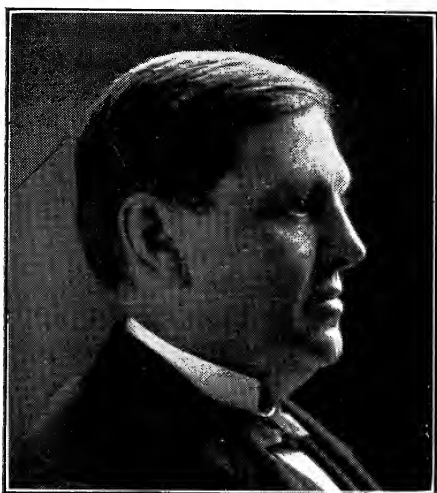
blast furnaces and mines of the same company. Since 1893, President and General Manager of the Thomas Iron Co., the Ironton R. R. Co., and Vice-President, Easton Trust Co. Is also a Director of several other Companies. As an expert, made a report on Consolidated Lake Superior Co;

on iron ore properties in Cuba and elsewhere; and on the International Harvester Co.

Member, American Inst. of Mining Engineers, The Iron and Steel Institute (Great Britain), Amer. Society for Testing Materials; Trustee, Franklin and Marshall College, Lancaster, Pa., and Riegelsville Academy. Has endowed the B. F. Fackenthal, Jr. Professorship of Natural Science in Franklin and Marshall College.

Business address: Easton, Pa.

Home address: Riegelsville, Pa.



WILLIAM ELLISTON FARRELL

VICE-PRESIDENT AND GENERAL MANAGER,
THE TREADWELL ENGINEERING COMPANY

BORN in Nashville, Tenn., February 7, 1870, son of Norman and Josephine (Elliston) Farrell. Educated in public schools of Nashville, Tenn.; Webbs Preparatory School, Culleoka, Tenn.; and graduate of Vanderbilt University, Nashville, Tenn., M. E. 1891.

In January, 1892, entered the employ of the North Branch Steel Co., Danville, Pa., and was successively chemist, shipping clerk, draftsman and master mechanic; 1896-1900, with the Philadelphia Roll and Machine Co., as time-keeper, Superintendent, and General Manager; 1900-1905, General Manager of Birdsboro Steel Foundry and Machine Co. Since 1905, Vice-President of M. H. Treadwell & Co.; since 1907, Vice-President, Lebanon Steel Casting Co.; since 1908, President of Stoever Foundry & Mfg. Co. These companies will be consolidated in 1911 under title of "The Treadwell Engineering Co."



Member, American Society of Mechanical Engineers. Member, University Club, Philadelphia; Pomfret Club, Easton, Pa.; Phi Delta Theta Fraternity. Vice-President, Good Samaritan Hospital, Lebanon, Pa.

Business address: Easton, Pa.

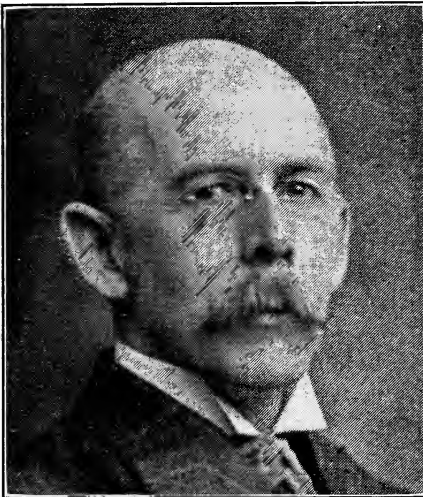
Home address: Easton, Pa.

ALVIN IRWIN FINDLEY

EDITOR,
THE IRON AGE

BORN in Monmouth, Ill., June 29, 1859, son of Samuel and Mary (Hardie) Findley. Educated at Buchtel College, Akron, Ohio, and at University of Wooster, Wooster, Ohio. Received the degrees of B. A., 1881, and A. M., 1886 (Wooster).

From 1881 to 1892, engaged in newspaper work at Akron and Cleveland, Ohio; Chicago, Ill.; and Philadelphia, Pa. In 1892, became connected with the



Iron Trade Review at Cleveland, Ohio, as Editor and as Vice-President of the Iron Trade Review Company. This company was merged in 1901 in the Iron and Steel Press Company (publishers of the Iron Trade Review and The Foundry) of which he was Secretary. In 1905,

became Associate Editor of the Iron Age. At present Editor of the Iron Age and Director of the David Williams Company, publishers of the Iron Age, Iron Age-Hardware, the Metal Worker and Building Age.

Member of Engineers' Club, New York; American Society for Testing Materials, Lake Superior Mining Institute, and American Foundrymen's Association.

Business address: 239 W. 39th St., New York City.

Home address: 202 W. 103rd St., New York City.

FREDERICK F. FITZPATRICK

PRESIDENT,
RAILWAY STEEL SPRING COMPANY

BORN near Peterboro, Province of Ontario, Canada, June 9, 1866, son of John and Elizabeth (Carlow) Fitzpatrick. Educated in the parochial schools of Chilli-cothe, Mo.

At age of fifteen, entered employ of Western Union Telegraph Co., as operator at Kansas City, and later as telegraph operator and train dispatcher on several railroads. In 1886,

entered the executive department of the Missouri Pacific R. R. In 1898, became the St. Louis representative of the Charles Scott Spring Co., which was merged in 1902, in the Railway Steel Spring Co. In 1905, was transferred to New York as General Sales Agent and later in the same year, made Vice-



President. On November 1, 1910, was elected President of the company. Also a Director and member of Executive Committee of Railway Steel Spring Co.; Director, U. S. & Mexican Trust Co., U. S. Life Ins. Co., Larchmont National Bank, and Carbon Steel Co.

Member of Railroad, Catholic and New York Athletic Clubs, New York; Larchmont Yacht Club; Apawamis, Wykagyl and Larchmont Golf Clubs.

Business address: 30 Church Street, New York.

Home address: Larchmont, New York.

HENRY STUART FLEMING

CONSULTING ENGINEER

BORN in Philadelphia, Pa., in 1863, son of Joseph and Emma (Scherzer) Fleming. Graduate of University of Pennsylvania, degree of Metallurgical Engineer, 1883.

Opened engineering office and chemical laboratory in Chattanooga, Tenn., in 1884. From 1885 to 1887, Asst. Superintendent and Chemist, Dayton Coal & Iron Co., Dayton, Tenn. In 1887, Superintendent, Furnace



and Ore Mines, Northwestern Iron Co., Mayville, Wis. In 1888, General Superintendent, Cameron Coal & Iron Co., Emporium, Pa. In 1890, opened engineering office in New York City, acting also until 1892, as Managing Editor of the Engineering and Mining Journal. Officer and Director of several industrial

companies. Secretary and Treasurer of Bituminous Coal Trade Association.

Member, Amer. Soc. Mechanical Engineers, Amer. Inst. Mining Engineers, Amer. Soc. Testing Materials, Inter. Assn. Testing Materials, North of England Inst. Mining and Mechanical Engineers. Member, Metropolitan, New York Yacht, Players' Clubs, New York; Exchange Club, Boston; Larchmont Yacht Club.

Business address: 1 Broadway, New York City.

Home address: 23 East 77th Street, New York City.

WILLIAM UHLER FOLLANSBEE

SECRETARY AND TREASURER,
FOLLANSBEE BROTHERS COMPANY

BORN in Pittsburgh, Pa., December 23, 1859, son of Gilbert and Maria Jackson (Haynes) Follansbee. Educated in the public schools of Pittsburgh, Pa.

Began as clerk and bookkeeper for Wm. H. Irwin, proprietor of the Rosedale Foundry, Pittsburgh. During 1879-1884, was clerk, salesman and buyer for Park, Scott & Co., Pittsburgh, manufacturers of sheet and bar copper and dealers in tin plate, sheets, etc. From 1884-1894, held the same positions and became a partner in James B. Scott & Co., successors to the above firm. In 1892, this firm began the manufacture of roofing tin plate. In 1894, with B. G. Follansbee, organized the Follansbee Brothers Company and has been Secretary-Treasurer and Director of this company since its organization. In 1904, this company put in operation sheet and tin plate mills at Follansbee, W. Va., and in 1906 added an open hearth steel plant.



Member of Duquesne Club and Bellevue Country Club, Pittsburgh. Trustee and Chairman of Finance Committee, Presbytery of Pittsburgh.

Business address: Pittsburgh, Pa.

Home address: 3712 Brighton Road, Pittsburgh, Pa.

ARTHUR ANDERSON FOWLER

PARTNER,
ROGERS, BROWN & COMPANY

BORN in New York City, March 1, 1878, son of Anderson and Emily (Arthur) Fowler. Studied four years at the Halsey School, New York City, and graduate of Columbia University, with the degree of A. B., in 1899.

After graduation, was associated with Fowler Brothers, Limited, and later in partnership with Anderson Fowler, his father, in the export grain business and in



private banking business until 1905. At that time, he entered the firm of Rogers, Brown & Company, and is now the New York member of the firm. Also Director of the Empire Steel & Iron Company, the Austin Coal & Coke Company, the Alabama & Georgia Iron Company, the Red Rock Fuel Company, Northern

Insurance Company and Caldwell Land & Lumber Company.

Member of University Club, New York, Seawanhaka-Corinthian Yacht Club, Columbia University Club and Psi Upsilon Fraternity; the Somerset Hills Country Club, Essex Polo Club and African Big Game Club. Member of Squadron A, New York National Guard.

Business address: 30 Church St., New York City.
Home address: 60 East 68th St., New York City.

LEWIS WITHERBEE FRANCIS

SECRETARY,

WITHERBEE, SHERMAN & COMPANY

BORN in Port Henry, N. Y., July 21, 1865, son of Lewis and Elizabeth V. (Witherbee) Francis. Educated at Berkeley School, New York City and graduate of Williams College, A. B., 1888.

Upon graduation, began work with the firm of Witherbee, Sherman & Co., miners of iron ore near Port Henry, N. Y. Later was admitted to partnership and was in charge of the sales department. In 1900, when the firm was incorporated, became Secretary and Assistant Treasurer and also continued to be in charge of sales as before. Also Director of the Cheever Iron Ore Co.; Second Vice-President and Director, Lake Champlain & Moriah R. R. Co.; Secretary, Treasurer and Director, Cubitas Iron Ore Co.; Secretary, Treasurer and Director, Witherbee Real Estate and Imp. Company.

Member, American Institute of Mining Engineers; Director of Witherbee Memorial Association, Mineville, N. Y.; School Trustee, Pelham, N. Y. Member, University Club and City Lunch Club, New York; Hamilton Club, Brooklyn; Pelham Country Club; Alpha Delta Phi Fraternity.

Business address: 2 Rector St., New York City.

Home address: Pelham Manor, N. Y.



JOSEPH HENRY FRANTZ

VICE-PRESIDENT AND GENERAL MANAGER,
THE COLUMBUS IRON & STEEL COMPANY

BORN in Cincinnati, Ohio, January 24, 1864, son of John H. and Eliza (Myer) Frantz. Educated in the public schools of Cincinnati, Ohio.

Has been employed in various branches of the iron and steel industry for the last twenty-six years, having served in many capacities. Was connected successively with The Cincinnati Corrugating Company, the Piqua



Rolling Mill Company, the American Sheet Steel Company, and the Columbus Iron and Steel Company, of which he is now Vice-President and General Manager; also President, North American Steamship Company, and The Fort Henry Mining Company; Vice-President of the Castile Mining Company, The

Reserve Mining Company, and the Consumers' Ore Company.

Director, Chamber of Commerce, Columbus. Member of American Institute of Mining Engineers. Member of Columbus Club, Columbus; Union Club, Cleveland; and Ohio Society of New York.

Business address: Columbus, Ohio.

Home address: 897 Franklin Avenue, Columbus, O.

FREDERICK FRAZER

PRESIDENT,

FRAZER AND JONES COMPANY

BORN in Syracuse, N. Y., April 5, 1855, son of Kasson and Julia A. (Richardson) Frazer. Educated at Mount Pleasant Military Academy, Ossining, N. Y.; Syracuse Public Schools; St. Johns Military School, Manlius, N. Y., and by private tutor in Leipsic, Germany.

Entered the employ of Frazer and Burns, in 1874, and in 1876 became partner, succeeding his father who died in 1875. Has contin-

ued with the same company under different firm names of Frazer and Burns, Frazer, Burns and Jones, and has been President of this company, now the Frazer and Jones Co., since 1906. President and General Manager of the Syracuse Steel Foundry Co., organized in 1887, sold to the American Steel



Casting Co., in 1894. Vice-President of the last named company in 1895, but sold his holdings in the company in 1896. Also an officer and Director of the U. S. Hame Co., of Buffalo, N. Y., since its organization in 1896, and now President of that Company; also a Director of Merchants National Bank of Syracuse, N. Y.

Member of Citizens Club, Century Club and Onondaga Golf and Country Club, of Syracuse, N. Y.

Business address: 351 W. Fayette St., Syracuse, N. Y.

Home address: 603 James St., Syracuse, N. Y.

JAMES WHEELER FULLER

PRESIDENT,

LEHIGH CAR, WHEEL AND AXLE WORKS

BORN in Catasauqua, Pa., April 2, 1873, son of James W. and Kate M. (Thomas) Fuller. Educated at Haverford Grammar School, Haverford, Pa., and Haverford College.

Entered the service of the Lehigh Car, Wheel and Axle Works, serving his apprenticeship through the various departments of the works. In 1896, became General Manager of the company and served in this capacity



until the death of his father in January, 1910, whom he succeeded as President. Also President of the Fuller Engineering Co., Vice-Pres. and General Manager of the Allentown Portland Cement Co.; Director, Empire Steel and Iron Co., Railway Steel Spring Co.; the Lehigh Foundry Co., and several other companies.

Member of the staff of Gov. Tener, of Pa. Member, Amer. Inst. Mining Engineers; Amer. Soc. Mechanical Engineers; Amer. Soc. for Testing Materials.

Member of Engineers, Machinery and Canadian Camp Clubs, New York; Egypt Mills Club, Phila.; Livingston, Elks, Lehigh Country Clubs, Allentown, Pa.; Catasauqua Club; Bethlehem Club; Trustee of St. Luke's Hospital, So. Bethlehem, Pa.

Business address: Catasauqua, Pa.

Home address: Catasauqua, Pa.

JAMES GAYLEY

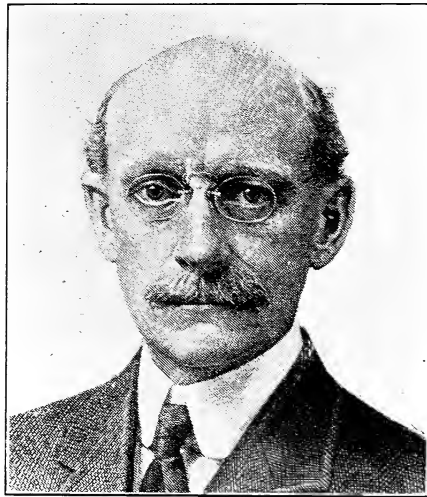
METALLURGICAL ENGINEER

BORN at Lock Haven, Pa., October 11, 1855, son of Samuel A. and Agnes (Malcolm) Gayley. Educated at West Nottingham Academy, Md. and graduate Lafayette College, M. E., 1876; Honorary degree, Sc. D., University of Pennsylvania, 1906.

Began as chemist for Crane Iron Co., Catasauqua, Pa., 1877-80. Superintendent, Missouri Furnace Co.,

St. Louis, and later Manager of Blast Furnaces, E. & G. Brooke Co., Birdsboro, Pa., 1880-85.

In 1885, became Manager of Blast Furnaces, Edgar Thomson Works and was subsequently promoted to the position of Manager of the Edgar Thomson Works, and later Managing Director of the Carnegie Steel Co.



In 1901, was made First Vice-President of the U. S. Steel Corpn., remaining until 1909. Inventor of furnace improvements; bronze cooling plates, stand for ladle in pouring Bessemer heats, and dry air blast.

Member American Institute of Mining Engineers, (President, 1904-06); Iron and Steel Institute (Great Britain); Metropolitan, University, Engineers', Lawyers', Ardsley and Riding Clubs, New York.

Business address: 71 Broadway, New York.

Home address: 5 East 58th St., New York.

FREDERICK CHARLES GEDGE

MANAGER WIRE MILLS, CHICAGO DISTRICT,
AMERICAN STEEL & WIRE COMPANY

BORN in Covington, Kentucky, March 27, 1856, son of William Henry and Mary Hannah (Kennedy) Gedge. Educated in public schools of Covington, Ky., Marion Co., Ill., and Kenton Co., Ky. Graduate of Nelson Business College, Cincinnati, O., 1875.

Operated farm in Marion Co., Ill., 1876-80; junior member, firm of Senour & Gedge, Manufacturers of To-



bacco, Covington, Ky., 1881-84; Vice-President, American Wire Nail Co., (Covington), 1885-90; plant removed to Anderson, Ind., 1891, and purchased by American Steel & Wire Co., 1898; Superintendent of Anderson plant, American Steel & Wire Co., 1898-99; Assistant Manager, Chicago District, 1900, then Super-

intendent of Waukegan Works until April 10, 1905, since which time he has been Manager of Wire Mills, Chicago District, American Steel & Wire Co. Also Vice-President and Director, Gedge Bros. Iron Roofing Co., Anderson, Ind. For four years, member City Council, Anderson, Ind.

Member Hamilton Club, Chicago.

Business address: Chicago, Ill.

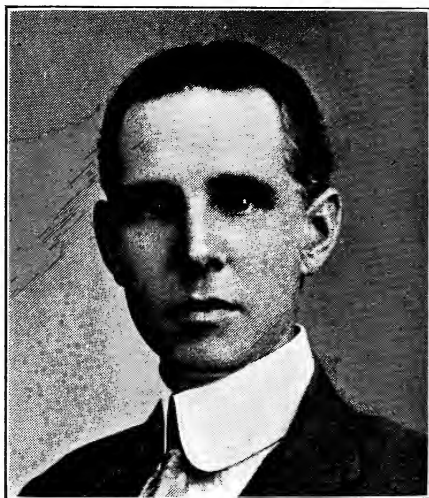
Home address: 795 Sheridan Road, Waukegan, Ill.

THEODORE ARTHUR GESSLER

MANAGER OF SALES,
AMERICAN SHEET AND TIN PLATE COMPANY

BORN in Elizabeth, New Jersey, May 23, 1873, son of Rev. Theodore A. K. (D.D.) and Annie (Sherborne) Gessler. Graduate of New York University, A. B., 1894; student in New York University Law School in 1894-95; student in Union Seminary, 1894-96; graduate student of Semitic languages in New York University and Columbia University, 1894-96. Received degree of M. A. from New York University in 1896. Fellow in Semitic Languages and Literature, University of Chicago, 1896-98. Received degree of B. D., University of Chicago in 1897.

In January, 1899, entered the employ of the American Tin Plate Co., and has remained with the company and its successor, the American Sheet



& Tin Plate Co., continuously since that time. Was promoted through various grades to the position of Manager of Sales. Also President of the Beach Haven Land Co.

Member of the Railroad Club, New York. Member of the Pilgrim Society, Psi Upsilon Fraternity, Phi Delta Phi Fraternity. Trustee, West Side Church of Lake Hopatcong.

Business address: 30 Church Street, New York.

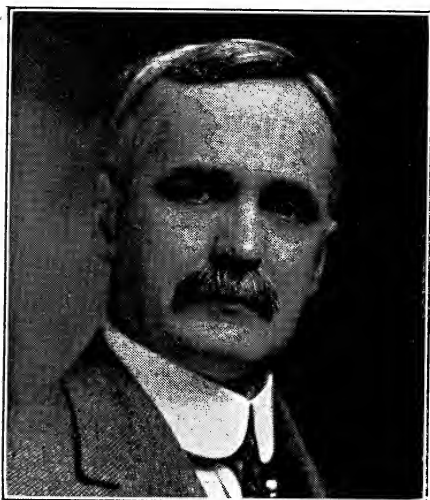
Home address: Bretton Hall, New York.

ALEXANDER GLASS

PRESIDENT,
WHITAKER-GLESSNER COMPANY

BORN in Wheeling, W. Va., July 24, 1859, son of Andrew and Harriet (Harris) Glass. Educated in the public schools of Wheeling, W. Va.

First engaged in the iron and steel industry in 1873 and during the period 1873 to 1890, was employed by several iron and steel companies. In 1890, with others, organized the Wheeling Corrugating Company. Was



elected Secretary of the company at its organization and has filled that position ever since. In 1908, he was elected President of the Portsmouth Steel Company, having previously held the office of Vice-President of this company. In 1910, was elected President of the Whitaker-Glessner Company of Wheeling, manu-

facturers of steel and iron sheets. Also Vice-President of the Whitaker Iron Company and the Wheeling Can Company; Secretary and Director of the Wheeling Corrugating Company; and Director of the Riverside Bridge Company.

Member of the Fort Henry Club, Wheeling, W. Va.

Business address: Wheeling, W. Va.

Home address: Kenwood Pl., Edgewood, Wheeling, W. Va.

EUGENE GIFFORD GRACE

DIRECTOR AND GENERAL MANAGER,
BETHLEHEM STEEL COMPANY

BORN in Goshen, New Jersey, August 27, 1876, son of John W. and Rebecca (Morris) Grace. Educated in Pennington Seminary, and graduate Lehigh University, 1899. Awarded prize in mathematics, Wilbur Scholarship prize, and finished course with first honors.

June 29, 1899, entered the employ of the Bethlehem Steel Co., in the Electrical department; June 8, 1902, appointed Superintendent of Yards; February 21, 1906, appointed Assistant to General Superintendent of the Company; during part of 1905, was General Superintendent of the Juragua Iron Co.; June 27, 1906, appointed General Superintendent of the Bethlehem Steel Co., and October 22, 1908, elected Director and Gen-



eral Manager of that Company, a position which he now occupies. Director of the Bethlehem Steel Corporation and several companies connected with Bethlehem Steel Co., Phila. Bethlehem & New England R. R. Co., Brown-Borhek Lumber Co., and South Side Banking Co.

Member, Engineers and Railroad Clubs, and the Pennsylvania Society, New York. Tau Beta Phi Fraternity.

Business address: South Bethlehem, Pa.

Home address: Prospect Avenue, Bethlehem, Pa.

WILLIAM THOMPSON GRAHAM

PRESIDENT,
AMERICAN CAN COMPANY

BORN in Lisbon, Ohio, November 13, 1850, son of John B. and Margaret (Graham) Graham. Educated in the public schools of Lisbon, Ohio.

From 1868 to 1873, Accountant for firms in Bridgeport, Ohio, and Wheeling, W. Va. Appointed Teller of the National Bank of Bridgeport in 1873, and became Cashier in 1877. In 1883, became Secretary and General



Manager, Standard Iron Co. and later, President. Was the first President of the Aetna-Standard Iron & Steel Co. On the organization of the American Tin Plate Co. in 1898, became Second Vice-President and later, First Vice-President and President. Was the first President of the American Sheet and Tin Plate Co.,

January, 1904. Resigned in August of that year, to become President of the American Can Co. President of Goldschmidt Detinning Co.; Director of Inter Ocean Steel Co., Columbian Enameling & Stamping Co., International Nickel Co., and Chic., Rock Is. & Pac. Ry. Co.

Member of Duquesne Club, Pittsburgh; New York Athletic, Greenwich Country, Apawamis, Lakewood Country and Indian Harbor Yacht Clubs.

Business address: 447 W. 14th St., New York City.

Home address: Greenwich, Conn.

EDWARD MCKIM HAGAR

PRESIDENT,

UNIVERSAL PORTLAND CEMENT COMPANY

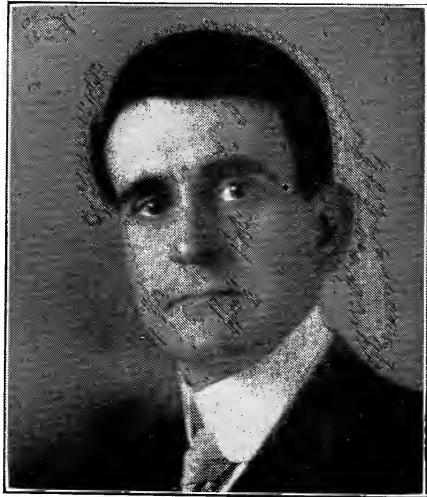
BORN in Salem, Mass., June 21, 1873, son of John McKim and Mary (Tucker) Hagar. Graduate, Mass. Inst. of Technology, S. B., 1893; Cornell Univ., M. M. E., 1894.

From 1895 to 1897, was Manager, Chicago office of Southwark Foundry and Machinery Co., of Philadelphia, engine builders; 1897 to 1900, senior member of the firm of Edward M. Hagar & Co., engaged in engine and machinery business in Chicago; on Jan. 1, 1900, became Manager of Cement Department, Illinois Steel Co.; on Oct. 1, 1906, became President of the Universal Portland Cement Co., a subsidiary of the U. S. Steel Corpn.

Member of Amer. Soc. Mechanical Eng.; Amer. Soc. Testing Materials; Amer. Soc. Civil Engineers; Western Soc. Engineers; Amer. Inst. Mining Engineers; Illinois Soc. Engineers and Surveyors; Pres. and Chair. Ex. Com., Assn. of Amer. Port. Cement Mfrs.; Pres. and Director, Cement Products Exhibition Co. Member of Engineers Club, N. Y.; Chicago Engineers, University, Union, Chicago, Onwentsia and Automobile Clubs, Chicago; Duquesne and Country Clubs, Pittsburgh; Phi Kappa Psi and Theta Nu Epsilon.

Business address: 72 West Adams St., Chicago, Ill.

Home address: 1210 Astor Street, Chicago, Ill.



JOHN LOCKE HAINES

ASSISTANT TO VICE-PRESIDENT,
JONES & LAUGHLIN STEEL COMPANY

BORN in Saco, Me., May 16, 1866, son of Moses J. and Hannah (Clark) Haines. Educated in the public schools of Portland, Me.

In 1887, entered the employ of the Pepperell Manufacturing Company, Biddeford, Me., manufacturers of cotton goods. In 1894, removed to Boston, Mass., and after engaging in business there with Walter R. Morse



& Company, cotton goods commission merchants for three years, went to Pittsburgh, Pa., in 1897, to accept a position in the Structural sales department of the Jones & Laughlin Steel Company, then known as Jones and Laughlins, Limited. In 1899, after being connected with the company for two years, was placed

in charge of the order department of this firm and continued to serve in this capacity until January 1, 1910, when he was appointed to the position of Assistant to the Vice-President.

Member of the Duquesne Club and Union Club, Pittsburgh; Pittsburgh Athletic Association and Engineers' Society of Western Pennsylvania.

Business address: Third Ave. and Ross St., Pittsburgh, Pa.

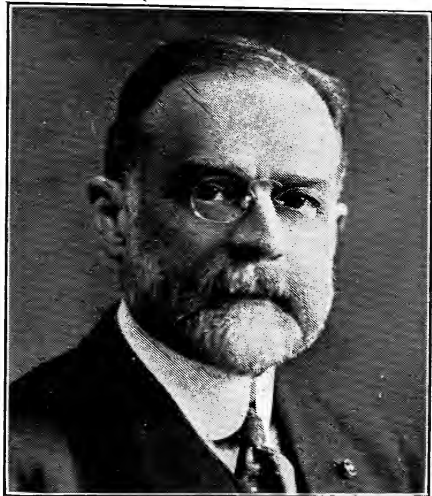
Home address: 1010 Farragut St., Pittsburgh, Pa.

HORACE LEANDER HALDEMAN

SECOND VICE-PRESIDENT, SECRETARY AND TREASURER,
PULASKI IRON COMPANY

BORN in Locust Grove, Conoy Township, Lancaster Co., Pa., September 16, 1847, son of Cyrus S. and Elizabeth Steman (Breneman) Haldeman. Educated in private and public schools of Philadelphia, Pa.

Engaged in the insurance business in 1865-67 and then entered the Passenger Dept. of the Pennsylvania R. R. In April, 1872, entered the firm of E. Haldeman & Co., at Chickies, Lancaster Co., Pa. The firm was succeeded by the Chickies Iron Co., and later Haldeman, Grubb & Co., of which he became Managing Partner. In October, 1898, sold his holdings and became Vice-President, Pulaski Iron Co. Also Director, Western National Bank, Philadelphia, and Reading & Columbia R. R. Secretary of the Virginia Pig Iron Assn.



Served in Civil War as First Lieutenant and Captain, 20th Reg., Penna. Cavalry. Has served on staffs of Governors Pennypacker, Stuart and Tener, 1903 to date.

Member of American Institute Mining Engineers, Franklin Institute of Philadelphia, American Foundrymen's Association, Philadelphia Foundrymen's Association, American Society for Testing Materials.

Business address: Philadelphia, Pa.

Home address: Marietta, Lancaster Co., Pa.

CHARLES HART

PRESIDENT,

DELAWARE RIVER STEEL COMPANY

BORN in Doylestown, Pa., January 5, 1869, son of Samuel and Ellen (Eastburn) Hart. Graduate of Swarthmore College with degree of Bachelor of Science, 1892.

Was first employed by the Carnegie Steel Company, but later left to join the Republic Iron and Steel Company. Was promoted through various grades to the



position of Vice-President and General Manager of the Republic Iron and Steel Company. Left this company in August, 1906, and accepted the position of President of the Inland Steel Company, Chicago, Ill., remaining with the company during the period 1906-08. In 1909, was elected President of the Delaware River Steel

Company, Chester, Pa., which company purchased the property of the Tidewater Steel Company at Chester.

Member of the Duquesne Club, Pittsburgh; the Youngstown Club, Youngstown, Ohio; the Phi Delta Theta Fraternity and Book and Key Society of Swarthmore College.

Business address: Chester, Pa.

Home address: Chester, Pa.

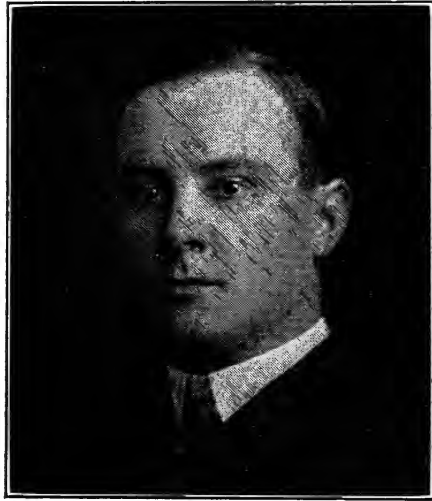
ALLYN FITCH HARVEY

ASSISTANT GENERAL MANAGER,
PITTSBURGH STEAMSHIP COMPANY

BORN at Cleveland, Ohio, February 3, 1871, son of Henry Allyn and Mary (Williams) Harvey. Educated in public schools of Cleveland, by private tutor, and graduate of Yale College, A. B., 1893.

From 1894 to 1901, with Pickands, Mather & Co., serving in various capacities. In 1901, went to Duluth, as Assistant to Vice-President of Pittsburgh Steamship Co., and in 1903, was

made Assistant General Manager. Returned to Cleveland when the offices of the company were transferred there, and has remained ever since in the same capacity. Vice-President and Director, American Fabric Belting Co.; Director, Provident Steamship Co., and Cleveland Folding Machine



Co.; Director and member of Executive Committee, Lake Carriers Association, and Director of the Canadian American Exploration Co.

Member, Mayfield, Union, Tavern, Country, Chagrin Valley Hunt, and Escuminac Clubs, of Cleveland; Kitchi Gammi and Northland Golf Clubs, Duluth; Yale Club, New York; Member Scroll and Key, and Delta Kappa Epsilon Fraternity.

Business address: Rockefeller Building, Cleveland.

Home address: 2199 East 40th Street, Cleveland.

JOSHUA ALEXANDER HATFIELD

PRESIDENT,

AMERICAN BRIDGE COMPANY OF NEW YORK

BORN in Philadelphia, Pa., June 11, 1863, son of Daniel Keyser and Margaret (Alexander) Hatfield. Educated in public and private schools in Philadelphia and at the Hill School, Pottstown, Pa.

In 1880, entered the office of the Pottstown Iron Co., Pottstown, Pa., and remained in the service of this company for sixteen years, during which time he was



advanced through various grades to the position of general sales agent; in 1896, became connected with the Pencoyd Iron Works and has continued with the company and its successor, the American Bridge Co., ever since. During period 1898-1900, was New York Manager for the company; in 1900, Assistant to the President,

American Bridge Co. of New Jersey. Since 1901, Vice-President, American Bridge Co., of N. J. and President, American Bridge Co., of N. Y. Also Director of A. & P. Roberts Co., Buffalo Creek, Cumberland Coal Co., and Plymouth Coal Mining Co.

Member of Engineers', Railroad, New York Yacht Clubs and Pennsylvania Society of New York. Member of Metropolitan Museum of Art, etc.

Business address: 30 Church Street, New York.

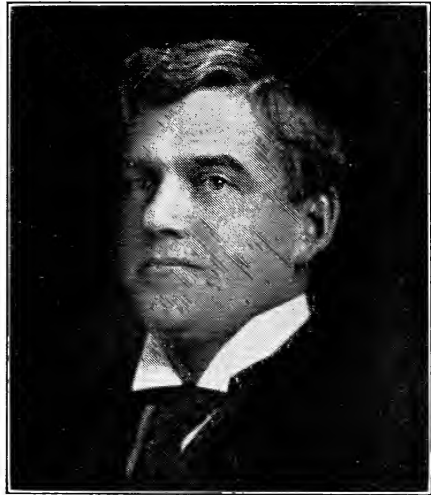
Home address: 1 West 81st Street, New York.

WILL LINTON HAYES

ASSISTANT MANAGER OF WIRE MILLS, CLEVELAND DISTRICT,
AMERICAN STEEL AND WIRE COMPANY

BORN in Newburgh, Cuyahoga Co., Ohio, June 21, 1862, son of William James and Sarah (Burwell) Hayes. Educated in the public schools, Cleveland, Ohio.

Entered office of Wire Department, Cleveland Rolling Mill Co., April 1, 1879; entered mill as apprentice, January 1, 1880, and worked in all departments. Became night foreman, December 1, 1882; Assistant Superintendent, April 1, 1883, and Superintendent, January 1, 1900, succeeding his father, W. J. Hayes, who had been connected with the Cleveland Rolling Mill Co. and its predecessors since April 1, 1858. In 1899, the control of the company passed to the American Steel & Wire Co., and in 1901 it became a part of the United States



Steel Corporation. Resigned, December 31, 1900, and entered the bond business with the firm of W. J. Hayes & Sons. Returned to the American Steel & Wire Co., in January, 1907, as Assistant Manager of Wire Mills, Cleveland District, which position he now holds.

Member of Union, Euclid and Roadside Clubs, Cleveland. Member of Cleveland Chamber of Commerce.

Business address: Cleveland, Ohio.

Home address: Euclid Heights, Cleveland, Ohio.

AUGUST HECKSCHER

VICE-PRESIDENT,
EASTERN STEEL COMPANY

BORN in Hamburg, Germany, August 26, 1848, son of G. Maurice and Marie Antoinette (Brautigam) Heckscher. Educated in Baden and Hamburg, Germany, and Neuchatel, Switzerland.

Removed to America in 1867; was interested for some fifteen years, 1868-1883, in anthracite coal mining in Schuylkill Co., Pa.; 1881-1905, interested in zinc



mining and manufacturing in New Jersey, Pennsylvania, Missouri, Kansas, Colorado, New Mexico, Virginia and elsewhere. Since 1905, interested in copper mining in Vermont, iron mining in New York and Virginia, and steel industry in New York and Pennsylvania. President, Vermont Copper Co., Benson Mines

Co., Central Iron and Coal Co., Windsor Trust Co.; Vice-President, Eastern Steel Co., American La France Fire Engine Co.; Director, New Jersey Zinc Co., etc.

Member, American Institute of Mining Engineers. Member, Union, Mid-Day, N. Y. Athletic, N. Y. Yacht, Seawanhaka, Deutsche Verein, Columbia, Motor Boat of America, Clubs, New York; Rittenhouse Club, Philadelphia; Huntington Country, Huntington Yacht Clubs.

Business address: 576 Fifth Avenue, New York.

Home address: 622 Fifth Avenue, New York.

LEDYARD HECKSCHER

TREASURER AND GENERAL MANAGER,
RICHARD HECKSCHER AND SONS COMPANY

BORN in Philadelphia, Pa., February 25, 1872, son of Richard and Lucretia Ledyard (Stevens) Heckscher. Graduate of Harvard University, A. B., 1894.

After graduation, entered the chemical laboratory of the Richard Heckscher & Sons Company, at their Swedeland Furnaces. Later, engaged in several mining ventures in South America and Mexico. Then re-

turned to the Richard Heckscher & Sons Company and became Assistant General Manager of the company; in 1901, was promoted to the position of General Manager; and, in 1906, was elected Treasurer of the Company, filling the dual position of Treasurer and General Manager ever since. Also, Director of



the Alan Wood Iron & Steel Company and the Upper Merion and Plymouth Railroad Company.

Member of the American Institute of Mining Engineers. Member of Markham Club and Radnor Hunt Club, Philadelphia; A. D. Club, Hasty Pudding Club, and Alpha Delta Phi Fraternity, Harvard University. Vice-President and Manager, Children's Sea Shore Home, Atlantic City.

Business address: Morris Building, Philadelphia, Pa.

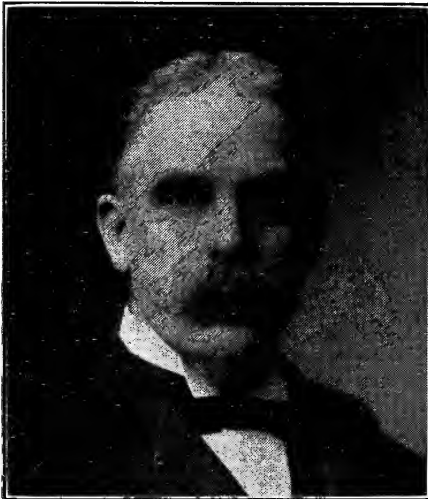
Home address: Radnor, Pa.

HENRY WEDDELL HEEDY

SECRETARY AND TREASURER,
THE ANDREWS & HITCHCOCK IRON COMPANY

BORN in Cleveland, Ohio, December 13, 1851, son of Michael and Mary (Glen) Heedy. Educated in the public schools of Cleveland, Ohio.

Was first employed as clerk and bookkeeper for a banking house in Cleveland. Was bookkeeper for Andrews Brothers & Co., Youngstown, from 1875 until the incorporation of The Andrews Brothers Co., in 1887,



when he was made Secretary and Assistant Treasurer of that company, and continued as such until the sale of the company to the Republic Iron & Steel Co., in 1899. Since 1899, has been connected with The Andrews and Hitchcock Iron Co., Youngstown, Ohio. Also Vice-President, The Youngstown Iron & Steel

Co.; Director of the G. M. McKelvey Co., Commercial National Bank, (Youngstown); Morgan Spring Co. (Worcester, Mass.), Cleveland Life Insurance Co., Shenango Steamship Co. Treasurer and General Manager, Lake Erie Limestone Co. and Union Limestone Co.

Member of Duquesne Club, Pittsburgh; Youngstown Club, Youngstown. Vice-President and Trustee of Charity Organization Society, Youngstown.

Business address: 901 Wick Building, Youngstown, O.

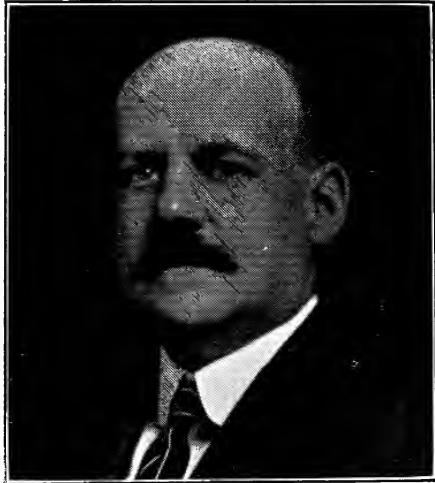
Home address: 423 Wick Avenue, Youngstown, O.

WILLIAM THOMAS HILDRUP, JR.

SECRETARY AND TREASURER,
HARRISBURG PIPE AND PIPE BENDING COMPANY

BORN in Harrisburg, Pa., January 19, 1862, son of William Thomas and Harriet (Essylstine) Hildrup. Educated in private schools of Harrisburg and West Chester, Pa.; graduate, University of Pennsylvania, B. S., 1882. Mechanical engineer, 1885. Took special course in metallurgy of iron and steel.

From 1882 to 1890, was connected with the Harrisburg Car Manufacturing Co., and was promoted through various grades, serving successively as mechanical engineer, Superintendent of the Car Wheel Foundry, and finally as Secretary and Assistant Treasurer. In 1890, organized a limited partnership which was subsequently incorporated in 1899, as the Harris-



burg Pipe and Pipe Bending Co., of which he is Secretary, Treasurer and Director. Also Director of First National Bank (Harrisburg) and Jackson Manufacturing Company. Member of Municipal League and Board of Trade, Harrisburg.

Member, Harrisburg Club, Masonic Fraternity, Royal Arcanum, and Beta Theta Phi Fraternity.

Business address: P. O. Box 757, Harrisburg, Pa.

Home address: 109 South Front St., Harrisburg, Pa.

FRANK HITCHCOCK

PRESIDENT,

THE ANDREWS AND HITCHCOCK IRON COMPANY

BORN in Youngstown, Ohio, May 24, 1862, son of William James and Mary Johnston (Peebles) Hitchcock. Educated in public schools, Youngstown; Adams Academy, Quincy, Mass.; Harvard University, Class of 1885.

Entered the service of Andrews and Hitchcock on May 24, 1883. On January 25, 1892, this firm was incorporated under the name of The Andrews and Hitchcock Iron Co. On February 10, 1892, became Secretary and Treasurer of this company and continued to act in this capacity until January 17, 1900, when he became President. Also Director of Mahoning Ore & Steel Co., Commercial National Bank (Youngstown), The Dollar Savings & Trust Co., (Youngstown), and the First National Bank (Youngstown). Vice-President, Modern Homes Co.



Member of the Association of Harvard Engineers. Member of Duquesne Club, Pittsburgh; Harvard Club, New York; Fort Schuyler Club, Utica, N. Y.; Union Club, Cleveland; Youngstown Club, Youngstown, Ohio. Trustee of Youngstown Hospital Association. President of Youngstown Chamber of Commerce in 1907.

Business address: 901 Wick Building, Youngstown, O.

Home address: 661 Wick Avenue, Youngstown, O.

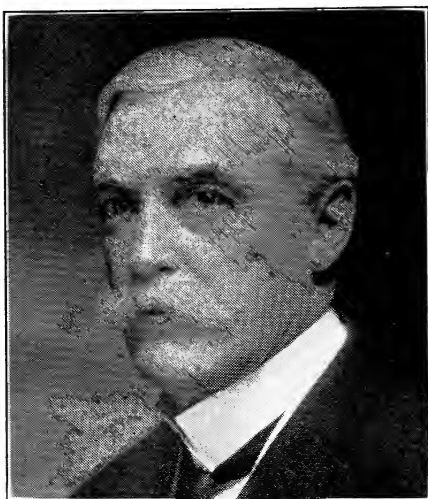
ROBERT HOBSON

VICE-PRESIDENT AND GENERAL MANAGER,
THE STEEL COMPANY OF CANADA, LIMITED

BORN in Berlin, Canada, son of Joseph and Elizabeth Hobson. Educated in the public schools of Hamilton, Ont.

In 1878, entered the office of his father, Chief Engineer of the Grand Trunk Railway System; remained with him until February, 1896, when he was appointed Secretary and Treasurer of the Hamilton Blast Furnace Co.; in May, 1899, was made Secretary and

Assistant Manager of the Hamilton Steel & Iron Co. and in May, 1902, was elected Vice-President and General Manager. On the consolidation of the Hamilton Steel and Iron Co., The Canadian Screw Co., The Canada Bolt and Nut Co., Montreal Rolling Mills Co. and The Dominion Wire Mfg. Co.



in The Steel Company of Canada, became its Vice-President and General Manager. Director of General Accident Assurance Co. and The Landed Banking Loan Co.

Member of the American Institute of Mining Engineers. Member of the Hamilton Club, Hamilton; Toronto and National Clubs, Toronto; Rideau Club, Ottawa, and St. James Club, Montreal.

Director of the Hamilton Health Association.

Business address: Hamilton, Ontario.

Home address: 56 Charlton Ave., Hamilton, Ontario.

GEORGE EDWARD HOLTON

PRESIDENT,

BRYDEN HORSE SHOE COMPANY

BORN in London, England, April 24, 1868, son of George and Hope Mary (Coumbe) Holton. Educated in schools of Norwood and London, England.

Came to America in 1886 and was naturalized in the early 90's. Entered the iron and steel industry in the employ of The Pencoyd Iron Works. In 1889, became inspector for G. W. G. Ferris and Co., of Pittsburgh, in



eastern territory and had charge of the inspection and testing of the cast-iron segments used in the construction of the first tunnel under the Hudson River, now known as the Hoboken Tunnel, originally undertaken by Pearson & Company of London, England. Since 1892, has been connected with the Horse Shoe Man-

ufacturing branch of the industry and is now President and Treasurer of the Bryden Horse Shoe Co. Also President and Treasurer of Emanuel & Co., and Director of Cement National Bank, Siegfried, Pa., and The National Bank of Catasauqua, Pa.

Member of Railroad Club, Engineers' Club and Pennsylvania Society of New York City.

Business address: Catasauqua, Pa.

Home address: Catasauqua, Pa.

WILLIAM STEWART HORNER

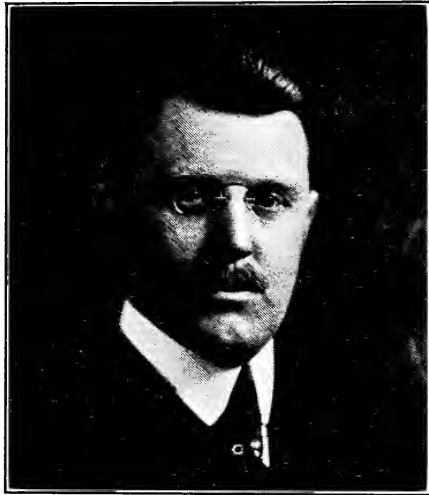
DIRECTOR AND PITTSBURGH DISTRICT MANAGER,
AMERICAN ROLLING MILL COMPANY

BORN in West Newton, Pa., April 1, 1868, son of G. B. and Lydia (Lawver) Horner. Educated in the public schools of West Newton, Pa.

Began as telegraph operator on B. & O. R. R. and learned stenography while night operator. In 1888, entered the employ of H. E. Collins & Co., Iron Brokers, Pittsburgh, as stenographer and telegraph operator.

In 1894, entered into partnership with H. P. Goff, under firm name of Goff, Horner & Co., Iron and Steel Brokers and is still a member of the firm.

In 1902, acquired an interest in the Curtis Sheet Steel and Corrugating Co. of Zanesville, Ohio., later known as the Muskingum Valley Steel Co., and conducted this business until



it was consolidated with the American Rolling Mill Co., Middletown, Ohio. At present, Director and Manager Pittsburgh District, American Rolling Mill Co., Secretary and Treasurer, Goff, Horner & Co., Ltd.; Vice-President, The Pittsburgh Shovel Co.

Member of Duquesne Club, Pittsburgh; Pittsburgh Athletic Association; Knights Templar, Chartiers Commandery; Treasurer, Bradley Children's Home.

Business address: Oliver Building, Pittsburgh, Pa.

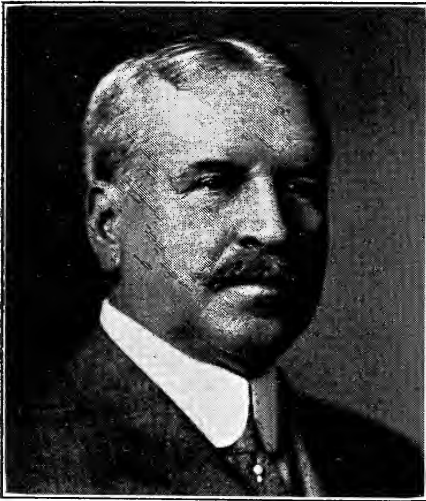
Home address: 1028 N. Negley Ave., Pittsburgh, Pa.

JAMES HUMPHREY HOYT

SECRETARY AND DIRECTOR,
PITTSBURGH STEAMSHIP COMPANY

BORN in Cleveland, Ohio, November 10, 1852, son of James Madison and Mary Ella (Beebee) Hoyt. Educated in public schools of Cleveland; graduate, Brown Univ., A. B., 1874; Harvard Univ. Law School, LL.B., 1877.

Has been engaged in practice of law in Cleveland, Ohio, since 1877. Now senior partner in firm of Hoyt, Dustin, Kelly, McKeehan & Andrews. Secretary and



Director, Pittsburgh Steamship Co., Provident Steamship Co., Standard Steamship Co., Acme Steamship Co., Peavey Steamship Co.; Director Cleveland-Cliffs Iron Co.; 2nd Vice-President, Director and General Counsel, Hocking Valley Railroad Co.; Secretary and Director, Lake Superior & Ishpeming Ry.; General

Counsel and Director, American Shipbuilding Co.; Director of several banks and trust companies.

Member of American, Ohio and Cuyahoga County Bar Assns. Member, Union, Country, Roadside, Euclid, University, Chagrin Valley Hunt, Athletic, Mayfield Country and Harvard Clubs, Cleveland; Metropolitan, University, Century, City Mid-Day, Alpha Delta Clubs, New York. Trustee, Carnegie Pension Fund.

Business address: Cleveland, Ohio.

Home address: 2445 Euclid Ave., Cleveland, O.

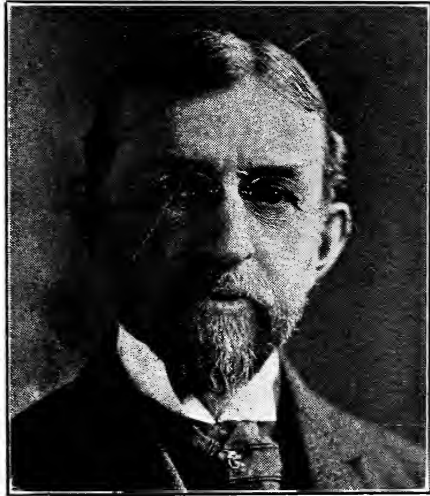
ABRAM FRANCIS HUSTON

PRESIDENT,

LUKENS IRON AND STEEL COMPANY

BORN in Coatesville, Pa., July 7, 1852, son of Charles and Isabella (Pennock) Huston. Educated at Taylor's Academy, Coatesville, and by private tutor. Graduate of Haverford College, Haverford, Pa., A. B., 1872.

On leaving college in 1872, entered the employ of the Lukens Iron & Steel Co. Took positions in the mills in order to learn the practical part in the various departments and later filled various positions in the main office serving as Bookkeeper, Purchasing Agent and Sales Agent. Acted also as travelling sales agent, making sales and visiting the various branch sales offices of the company. Went to Europe in 1883 and 1886 in order to arrange for the importation of steel slabs,



profitable at that time on account of reduction of the tariff. Since 1897, President of the Lukens Iron & Steel Company. Also President of the Jacobs-Shupert U. S. Fire Box Company and the Coatesville Trust Company.

Director of the Allegheny Ore and Iron Company. President of Coatesville Hospital; Director of Haverford College, and Director of Y. M. C. A., Coatesville.

Business address: Coatesville, Pa.

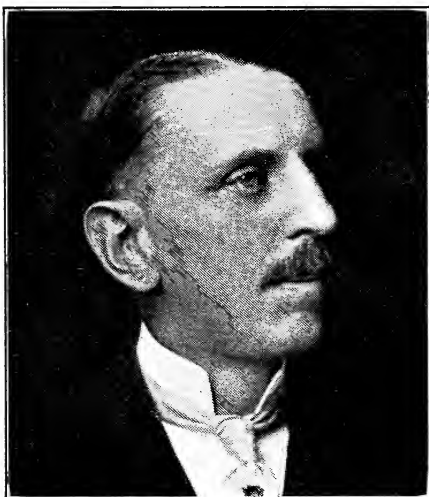
Home address: Coatesville, Pa.

OCTAVUS NELSON HUTCHINSON

PRESIDENT AND TREASURER,
GRAND CROSSING TACK COMPANY

BORN in Rockland, Mass., February 26, 1862, son of Henry Blakely and Rebecca Whiting (Wilkes) Hutchinson. Educated in public schools of Abington, Mass.

Entered the employ of the Chicago Tack Co., in 1881, and remained with that company for ten years, during the period 1884 to 1891 being Manager of the plant. The thorough and practical methods which he



used while Manager of the Chicago Tack Company attracted the attention of the owners of the Grand Crossing Tack Company, and was the cause of his being engaged as Manager of that company in 1891, holding that position for ten years. In 1901, was elected President, Treasurer and General Manager of this company

and still continues to hold these positions. Also President and Treasurer of the Chicago Tack Co.

Member of New England Society of Chicago, and South Shore Country Club. Trustee of Ingleside Avenue M. E. Church of Chicago.

Business address: 79th Street and South Chicago Ave., Chicago, Ill.

Home address: 7419 Monroe Avenue, Chicago, Ill.

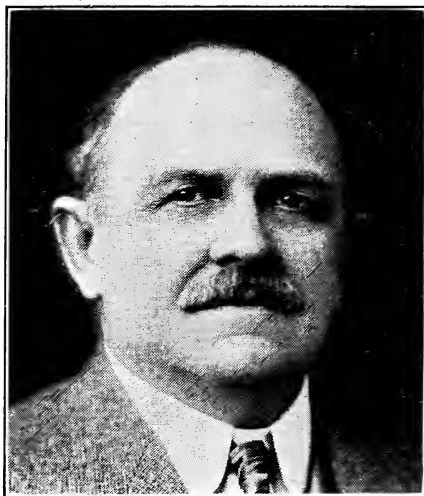
THOMAS JESSE HYMAN

SECRETARY AND TREASURER,
ILLINOIS STEEL COMPANY

BORN in Camanche, Clinton Co., Iowa, April 8, 1855, son of Sylvester and Mary Elizabeth (Elce) Hyman. Educated in the public schools of Camanche, at the Iowa State College, Cornell University and Eastman's National Business College.

In 1876, entered the employ of the Sioux City and Pacific Railroad as bookkeeper and paymaster, remaining three years; from 1880

to 1884, was Paymaster and Freight Auditor for the Saint Paul and Sioux City Railroad and the C., St. P., M. & O. Ry.; during the period 1885 to 1887, was Auditor of the Minneapolis and St. Louis Railway and from 1888 to 1891, Auditor of the Wisconsin Central Lines; in 1892 and 1893, was Assist-



ant to the President of the Great Northern Railway. Was one of the organizers and a charter member of the Association of Railway Accounting officers in the eighties. From 1894 to 1898, served several railroads as an expert on special service. Since 1899, has filled the position of Secretary and Treasurer of the Illinois Steel Co., and various other related subsidiary corporations of the United States Steel Corporation.

Business address: Chicago, Ill.

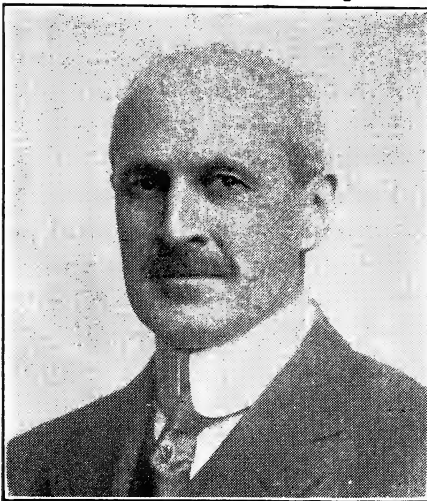
Home address: 315 Wesley Ave., Oak Park, Ill.

JAMES INGLIS

PRESIDENT,
AMERICAN BLOWER COMPANY

BORN in Detroit, Michigan, August 15, 1864, son of Richard and Agnes (Lambie) Inglis. Educated in the public schools of Detroit, Mich.

Began as office boy and worked for five years in wholesale hardware stores. At the age of 19, became manager of Detroit Sanitarium, remaining three years. After being employed in two or three manufacturing



concerns, became connected with the Huyett & Smith Mfg. Co. in 1890, and has ever since been connected with the manufacture of blowing machinery, remaining with this company and its successors. This company was succeeded by the American Blower Co., of Michigan in 1895, and by the American Blower Co.,

of New York in 1909. Promoted through various grades in this company to the office of President. Also Director of the National Bank of Commerce (Detroit) and Michigan Savings Bank (Detroit). President of Detroit Board of Commerce in 1906.

Member of Detroit Club, Country Club and Detroit Boat Club. Director of Young Men's Christian Association and Provident Loan Society.

Business address: Detroit, Michigan.

Home address: 626 E. Grand Boulevard, Detroit, Mich.

ROBERT LIVINGSTON IRELAND

PARTNER,

M. A. HANNA & COMPANY

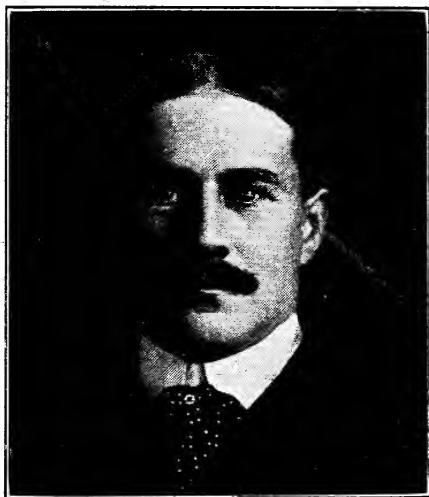
BORN in Milford, Conn., August 20, 1867, son of John B. and Adelia (Duane) Ireland. Graduate of Yale University, B. A., 1890.

Removed from New York to Cleveland, Ohio, in 1892. Started as clerk in employ Globe Ship Building Co. in 1894, and in 1898, was made Vice-President of this company and also of the Ship Owners Dry Dock Co. At the formation of the American Ship Building Co., which consolidated all the ship yards on the Great Lakes in 1899, became Vice-President of that company and member of the Finance Committee. Resigned in 1904, to become a partner in M. A. Hanna & Co. Also Vice-President and Director in following companies: Detroit Iron & Steel, United Iron & Steel, Pittsburgh Ore, La Rue Mining, Croxton Mining, Nassau Mining, American-Boston Mining, Hollister Mining, Consumers Ore, Nokoy Iron, Virginia Ore, Richmond Iron, and a number of coal, steamship and dock companies.

Member of University and Yale Clubs, New York; Union, Country, Euclid, Mayfield, Hunt, Athletic, Roadside and Tavern (President) Clubs of Cleveland.

Business address: Perry Payne Bldg., Cleveland, O.

Home address: Lake Shore Boulevard, Cleveland, O.



JOSEPH WALTER JEFFREY

VICE-PRESIDENT AND GENERAL MANAGER,
THE OHIO MALLEABLE IRON COMPANY

BORN in Columbus, Ohio, February 16, 1880, son of Joseph A. and Celia C. (Harris) Jeffrey. Educated in the public schools of Columbus and in a school in Dresden, Germany, finishing preparatory work at the Central High School in Columbus, Ohio. Graduate of Williams College, Williamstown, Mass., B. A., 1902.

Started work in the shops of The Jeffrey Mfg.



Co., serving in the blacksmith, foundry and machine departments, and afterwards taking up work in the office of the company. In 1905, the Jeffrey Mfg. Co. took over the entire management of the Ohio Malleable Iron Co., of which it had previously held controlling interest, putting Mr. Jeffrey in charge as Director, Vice-

President, and General Manager, which positions he holds at the present time. Also Assistant Secretary and Director of the Jeffrey Mfg. Co. and Second Vice President and Director of the Commercial Improvement Company.

Member and Director of Ohio Club of Columbus; member of the Arlington Country Club and Chi Psi Fraternity. Director of the Columbus Humane Society.

Business address: Columbus, Ohio.

Home address: Chaseland, Worthington, Ohio.

GEORGE WALDOW JEWETT

MANAGER OF WIRE MILLS, PITTSBURGH DISTRICT,
AMERICAN STEEL AND WIRE COMPANY

BORN in Peterborough, N. H., December 15, 1859, son of George A. and Mary (Brown) Jewett. Educated in the public schools of Peterborough, N. H.

In 1880, secured a position with the Baker Wire Company, Des Moines, Iowa. This company purchased the Grant Wire Co. and removed to Lockport, Ill. In 1886, became Superintendent of the Lockport plant.

The Baker Wire Company was later merged in the Consolidated Steel & Wire Company and Mr. Jewett remained with the latter company as Superintendent of the Lockport plant. The completion of the Chicago Drainage Canal compelled the abandonment of the plant at Lockport and the Enterprise plant in Joliet, Ill.,



was purchased. Was Supt. at Joliet until transferred to Cleveland, Ohio, as Supt. of the Consolidated Works at that place. The Consolidated Steel & Wire Co. was merged in the American Steel & Wire Co. In 1901, Mr. Jewett was appointed Pittsburgh District Manager of Wire Mills of the latter company.

Member, Union Club and Pittsburgh Athletic Assn., Pittsburgh; and Livingston Club, Allentown.

Business address: Pittsburgh, Pa.

Home address: 300 So. Negley Ave., Pittsburgh, Pa.

ARCHIBALD JOHNSTON

FIRST VICE-PRESIDENT,
BETHLEHEM STEEL CORPORATION

BORN in Phoenixville, Pa., May 30, 1865, son of Joseph and Martha (Stroman) Johnston. Educated in public schools, Bethlehem, Pa., and graduate of Lehigh University, M. E., 1889.

In 1889, entered Physical Testing Department, Bethlehem Iron Works and later was placed in charge of the erection and operation of the gun forging plant, the



first in this country. In 1890, was placed in charge of erection and subsequent operation of the Armor Plate Department, the first in this country. Held this position for a number of years. Was made Assistant General Superintendent and, later, Vice-President of the Bethlehem Steel Corporation.

Member of Iron and Steel Institute, Great Britain; Amer. Soc. of Mechanical Engineers; Amer. Institute of Mining Engineers. Member, Railroad Club, New York; University and Union League Clubs, Philadelphia; Metropolitan Club, Washington, D. C.; Bethlehem Club, Country Club of Northampton County, Northampton Club, Lincoln Republican Assn., and Lehigh Country Club, Bethlehem. Trustee of Moravian College and Theological Seminary.

Business address: South Bethlehem, Pa.

Home address: 120 Church Street, Bethlehem, Pa.

LESLIE MORGAN JOHNSTON

ASSISTANT GENERAL MANAGER,

A. M. BYERS COMPANY

BORN in Whitestown, Oneida Co., N. Y., October 4, 1876, son of Elliott Waters and Emily J. (Clark) Johnston. Graduate of Yale University, B. A., 1902.

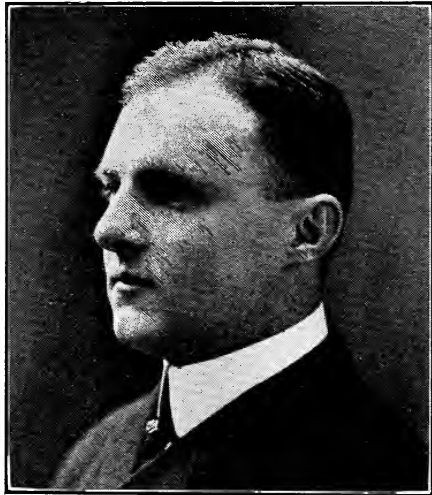
After completing his education, joined the A. M. Byers Company of Pittsburgh, Pa., manufacturers of wrought iron pipe, and has remained with the company continuously since the fall of 1902. Has served the company in various capacities, having been promoted through several grades to the position of Assistant General Manager of the company, which position he now holds.

In 1904, when the A. M. Byers Company leased the plant of the Clearfield Steel & Iron Co., Clearfield Pa., he was appointed manager of the plant serving in this capacity until 1908. In the latter year, returned to Pittsburgh as Assistant General Manager of the Pittsburgh, Pa., and Girard, Ohio, plants.

Member of the Pittsburgh Club, Pittsburgh Golf Club, Allegheny Country Club of Pittsburgh, Pa. Member of the Alpha Delta Phi Fraternity, Scroll and Key Society of Yale University.

Business address: 235 Water St., Pittsburgh, Pa.

Home address: 5307 Westminister St., Pittsburgh, Pa.



HARRY ROSS JONES

TREASURER AND GENERAL MANAGER,
THE UNITED STEEL COMPANY

BORN in Youngstown, Ohio, June 27, 1869, son of David and Martha (Ross) Jones. Educated in public schools and Rayen High School, Youngstown, Ohio, and subsequently studied bridge and structural engineering.

On August 19, 1889, entered the employ of the Youngstown Bridge Co., in the engineering department. In 1891, was transferred to the Cleveland office of this



company and entered the contracting department. In 1892, entered the service of the Variety Iron Works Co., Cleveland, in the contracting department, and after being in 1893-1894 with the Columbus Bridge Co., in the same capacity, returned to the Variety Iron Works Co., and remained with them during the period 1894-1899.

From 1899 to 1902, was with the Osborn Engineering Co., Cleveland, as contracting engineer and one of the junior partners. In 1902-1903, was with the Southern States Portland Cement Co., Atlanta, Ga. Since Jan. 1, 1904, with The United Steel Co., Canton, O. Also, Vice-President and Secretary of The United Electric Co., Canton.

Member of Canton Club, Canton, O.

Business address: The United Steel Co., Canton, O.

Home address: 804 N. Cleveland Ave., Canton, O.

JONATHAN READ JONES

SECRETARY AND TREASURER,
ALAN WOOD IRON AND STEEL COMPANY

BORN in Conshohocken, Pa., December 24, 1846, son of Charles and Sarah (Read) Jones. Graduate in Civil Engineering, 1865, Polytechnic College of State of Pennsylvania, Philadelphia, Pa.

From 1866 to 1878, engaged in business as an engineer in the construction of bridges and buildings, being connected with J. H. Linville, engineer for the Penna. R. R., and for The Pennsylvania Steel Co., during the construction of its Steelton plant. During part of this time was also connected with the Keystone Bridge Co., of Pittsburgh. For eight years, 1878 to 1886, was engaged in private practice as engineer and contractor for the construction of bridges and buildings. In 1886, became



Secretary and Treasurer, of the Alan Wood Iron & Steel Co., which position he still holds. The company owns and operates an open hearth steel plant and two rolling mills at Conshohocken, Pa. Also Secretary and Treasurer of Upper Merion & Plymouth R. R. Co., and President, Richard Heckscher & Sons Co.

Member of Franklin Institute and Art Club of Philadelphia.

Business address: 1421 Chestnut Street, Phila., Pa.

Home address: Hamilton Court, Philadelphia, Pa.

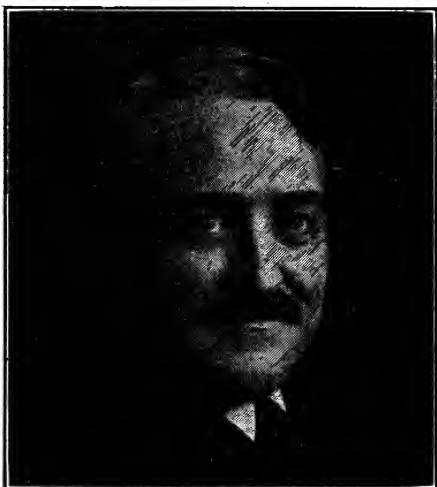
JOHN S. KEEFE

VICE-PRESIDENT,

AMERICAN STEEL AND WIRE COMPANY

BORN in Boston, Mass., January 24, 1864, son of David F. and Sarah J. (Simpson) Keefe. Educated in the public schools of Boston, Mass.

Has been connected with the iron and steel business since 1889, chiefly in the department of management of traffic. Entered the employ of the Illinois Steel Co., Chicago, in 1899 and remained with the company for



ten years, 1889-1899, holding the position of Traffic Manager during that period. Resigned in 1899, to accept the position of General Traffic Manager of the American Steel and Wire Co., of New Jersey and continued to hold this position with the company until 1901, when he was elected Vice-President and Director of the

company, which position he now holds. He also served as Chairman of the Traffic Committee of the United States Steel Corporation since 1903.

Member of the Union League Club, Chicago; Lawyers Club, New York; Union Club, Cleveland, and Union Club, Pittsburgh.

Business address: 72 West Adams St., Chicago, Ill.

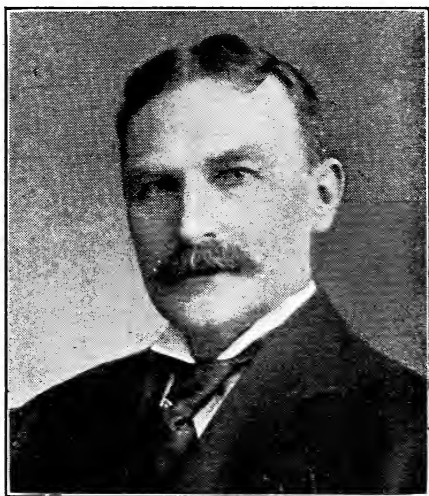
Home address: 411 Clinton Ave., Oak Park, Ill.

IRONTON A. KELLY

PRESIDENT,
ASHLAND STEEL COMPANY

BORN in Ironton, Ohio, son of William D. and Sarah (Austin) Kelly. Educated in the public schools of Ironton, Ohio.

In 1884, organized the Kelly Nail and Iron Co., of Ironton, of which he was Vice-President and General Manager until 1891. Then removed to Ashland, Ky. and with his associates organized the Ashland Steel Co., of which he was made President and General Manager and has held this position continuously from the organization of the company. While Mr. Kelly has given the major portion of his time to the management of the affairs of the Ashland Steel Co., he has at all times retained his interest and official position in the Kelly Nail & Iron Company and still remains as Vice-President and Director of the Kelly Nail and Iron Co., and is also Vice-President and Director of the Merchants Bank and Trust Co. (Ashland), which he, with other associates, organized in 1906. For some years Member and President of the City Council, Ironton, Ohio.



Member of Park City Club, Ashland, Kentucky.

Business address: Ashland, Kentucky.

Home address: Ashland, Kentucky.

WILLIAM VALLANDINGHAM KELLEY

PRESIDENT,

AMERICAN STEEL FOUNDRIES

BORN in Gratis, Ohio, February 13, 1861, son of William J. and Susan E. (Taylor) Kelley. Educated at the high school, Greenville, Ohio, and by a commercial course in Cincinnati.

Began business as clerk and bookkeeper in hardware store, Springfield, Ohio; afterward Sales Agent of Springfield Malleable Iron Co., and later Sales Agent



for Charles Scott Spring Co.; since organization, President and Treasurer of the Simplex Railway Appliance Co., which was purchased by the American Steel Foundries. Mr. Kelley has been President of the last named company since 1905. Also President of the Miehle Printing Press & Mfg. Co.; Director of Phoenix

Horse Shoe Co., Continental and Commercial National Bank, Continental & Com. Trust and Savings Bank, Commercial National Safe Deposit Co., Union Trust Co., South Side Elevated Ry., and Allis Chalmers Co.

Member of Chicago, Union League, Athletic Assn., South Shore Country, Mid-Day, Onwentsia, Chicago Golf, Glen View and Exmoor Country Clubs, of Chicago; Shinnecock Hills Golf Club, National Golf Links.

Business address: 115 Adams Street, Chicago, Ill.

Home address: 4849 Ellis Avenue, Chicago, Ill.

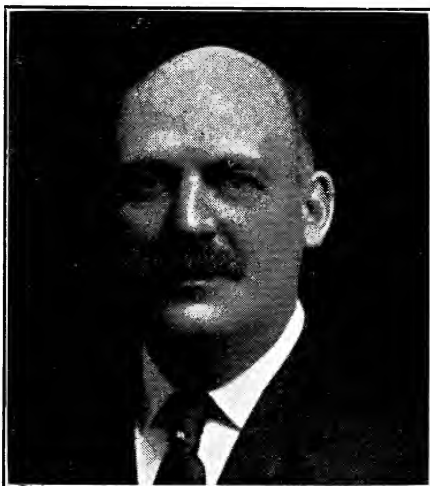
HUGH KENNEDY

VICE-PRESIDENT AND GENERAL MANAGER,
ROGERS-BROWN IRON COMPANY

BORN in Poland Township, Mahoning County, Ohio, July 24, 1856, son of Thomas Walker and Margaret (Truesdale) Kennedy. Educated in the Poland Union Seminary, Poland, Ohio, and has the honorary degree of LL.D. from Cooper College, Stirling, Kansas.

In 1880, entered the employ of the Carnegie Steel Co., at Braddock, Pa., as Assistant to the Superintendent,

his brother Julian Kennedy, in charge of the construction and operation of blast furnaces at the Edgar Thomson Works. On January 1, 1881, was appointed Superintendent of the Isabella Furnaces, Etna, Pa., and in April, 1899, was made Director and Manager of the Furnace Department of the American Steel Hoop Co.



which at that time purchased the properties of the Isabella Furnace Company. In 1902, became General Manager of the Buffalo and Susquehanna Iron Co., Buffalo, New York, and is at present, Vice-President and General Manager of the Rogers-Brown Iron Co., successors of the Buffalo and Susquehanna Iron Co. Director of Marine National Bank, Buffalo, N. Y. President, Y. M. C. A., Buffalo.

Business address: Buffalo, New York.

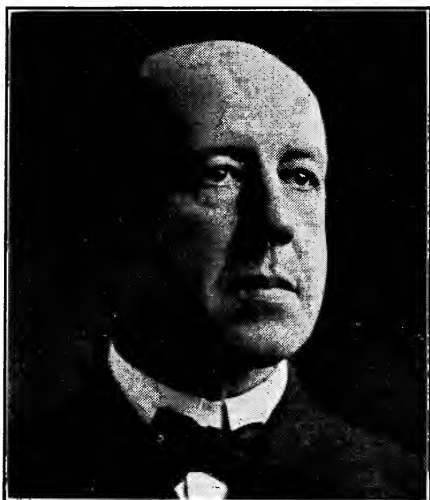
Home address: Buffalo, New York.

JULIAN KENNEDY

CONSULTING ENGINEER

BORN in Poland, Ohio, March 15, 1852, son of Thomas Walker and Margaret (Truesdale) Kennedy. Educated at Poland Union Seminary and graduate Yale University, Ph. B., 1875; M. A., 1900. Doctor of Engineering, 1909, Stevens Institute of Technology.

Has for many years engaged in practice as a consulting engineer and has planned many of the large steel



plants in U. S. American Director, Julian Kennedy, Sahlin & Co., Ltd.; Director, Punxsatawney Iron Co., Cleveland Furnace Co., and Toledo Furnace Co.; President Orient Coke Co., Emerald Coal & Coke Co., and Emerald Coal Co. President, American Casting Machine Co. Vice-President, Electric Power &

Manufacturing Co., and Boise & Interurban Railway Co.

Member of Iron and Steel Institute (Great Britain) and American Institute of Mining Engineers.

Member of Duquesne, University, Pittsburgh Golf and Pittsburgh Country Clubs, Pittsburgh; Engineers and University Clubs, New York. Member, Chamber of Commerce, New York; Chamber of Commerce, Pittsburgh. Trustee of Westminster College.

Business address: Bessemer Bldg, Pittsburgh, Pa.

Home address: 5400 Forbes Street, Pittsburgh, Pa.

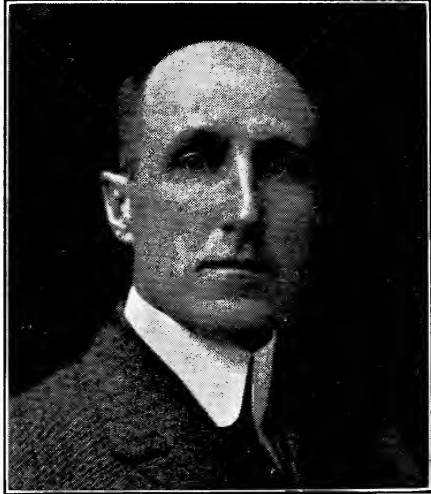
THOMAS WALKER KENNEDY

PRESIDENT AND GENERAL MANAGER,
ADRIAN FURNACE COMPANY

BORN in Poland, Mahoning Co., Ohio, December 25, 1869, son of Thomas Walker and Margaret (Truesdale) Kennedy. Graduate of Westminster College, New Wilmington, Pa., B. S., 1891.

In 1892, secured a position with Spang, Chalfant & Co. at their Isabella Furnaces and remained with this company for the period of ten years, occupying success-

ively the positions of Assistant Chemist, Chemist, Furnace Foreman, Assistant Superintendent and General Superintendent of the Company. During this period the Company was absorbed by the American Steel Hoop Co., and was merged later with the Carnegie Steel Co. In 1902, left the Carnegie Steel Co. to accept the



position of Superintendent of Construction of the Adrian Furnace at Du Bois, Pa., and after the completion of the construction in 1904, was elected President and General Manager of the Adrian Furnace Company, organized in that year to lease and operate the Adrian Furnace. Mr. Kennedy has remained with the company as President and General Manager since that time.

Business address: Du Bois, Pa.

Home address: Du Bois, Pa.

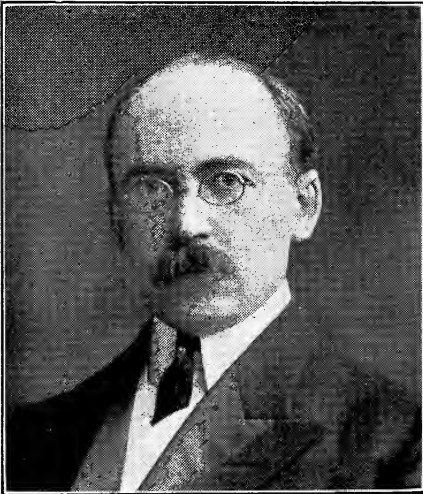
SEVERN PARKER KER

PRESIDENT,

SHARON STEEL HOOP COMPANY

BORN in Richmond, Va., February 17, 1864, son of Heber and Mary (Kinney) Ker. Educated in the public schools of Staunton, Va.

Began as clerk in local stores and for the B. and O. R. R. Later became Private Secretary to Major Jedidiah Hotchkiss. In 1885, moved to Pittsburgh, Pa., and secured employment in the office of Smith,



Sutton & Co., later known as La Belle Steel Co. Became Asst. Secretary and later Secretary, remaining with the company until 1899. In 1899, became General Manager of Sales for the American Steel Hoop Co., and soon after Vice-President, which position he held until 1901. Then became associated with

the Crucible Steel Co. In January, 1905, joined the Republic Iron and Steel Co., and in April became Vice-President. On October 1, 1909, became General Manager of the Sharon Steel Hoop Co., and in February, 1910, President.

Member Duquesne Club, Pittsburgh; F. H. Buhl Club, Sharon Club and Sharon Country Club, Sharon, Pa.; Mid-Day Club, Chicago.

Business address: Sharon Steel Hoop Co., Sharon, Pa.

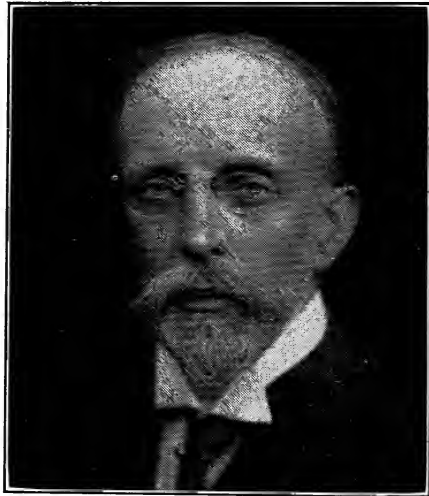
Home Address: 462 East State Street, Sharon, Pa.

CHARLES WILLIAM HENRY KIRCHHOFF

MINING AND METALLURGICAL ENGINEER

BORN at San Francisco, Cal., March 28, 1853, son of Charles and Virginia (Siemsen) Kirchhoff. Graduated as mining engineer and metallurgist at Royal School of Mines, Clausthal, Germany, 1874.

During 1874-1877, chemist, Delaware Lead Refinery, Philadelphia; 1877-78, assistant editor, Metallurgical Review; 1878-81, assistant editor, The Iron Age; 1881-84, managing editor, Engineering and Mining Journal; 1884-89, associate editor, The Iron Age; 1889-1909, editor, The Iron Age; 1904-1909, Vice-President and General Manager of David Williams Co. Retired from active business in 1909.



Author of Notes on some European Iron Districts and large number of articles in technical periodicals. Special Agent, U. S. Geological Survey, on statistics of lead, copper and zinc.

Member of Century, Engineers, Clubs of New York; member, American Institute of Mining Engineers (President 1898-99 and 1911-1912), Iron and Steel Institute (Great Britain), Verein Deutscher Eisenhuettenleute, American Society of Mechanical Engineers, Franklin Institute of Philadelphia (honorary), American Society for Testing Materials, American Electro-chemical Society.

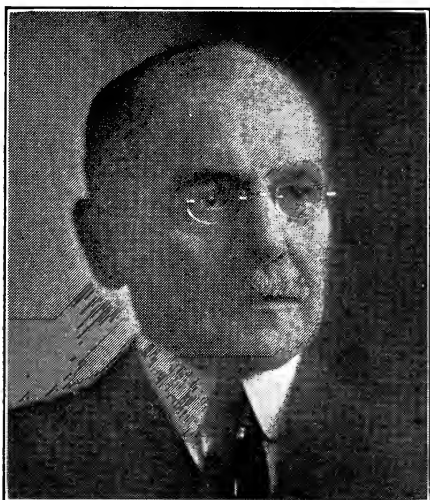
Home address: 244 Riverside Drive, New York.

FRED KREBS

DIRECTOR AND GENERAL MANAGER OF SALES,
CAMBRIA STEEL COMPANY

BORN in Johnstown, Pa., June 9, 1855, son of Frederick and Sophia (Bergman) Krebs. Educated in private and public schools of Johnstown, Pa.

Entered the service of Cambria Iron Co., at age of sixteen, as clerk and subsequently promoted through the grades of time-keeper, Assistant Superintendent of the Gautier Mills and Superintendent of the Gautier



Mills. In the latter capacity of Superintendent had charge not only of the manufacturing processes in the Gautier plant but also had supervision of the sales of the products of the Gautier Plant. After several years experience in handling the sales of this department was appointed May 1, 1907 General Manager of Sales

of Cambria Steel Co., with offices at Johnstown which position he now holds. Elected Director of the Cambria Steel Co. in March, 1910. Also Director, United States National Bank and Peoples Building and Loan Assn. Formerly member and President of School Board, Johnstown. President of Board of Managers of Conemaugh Valley Memorial Hospital.

Member of Duquesne Club, Pittsburgh.

Business address: Cambria Steel Co., Johnstown, Pa.

Home address: 509 Napoleon Street, Johnstown, Pa.

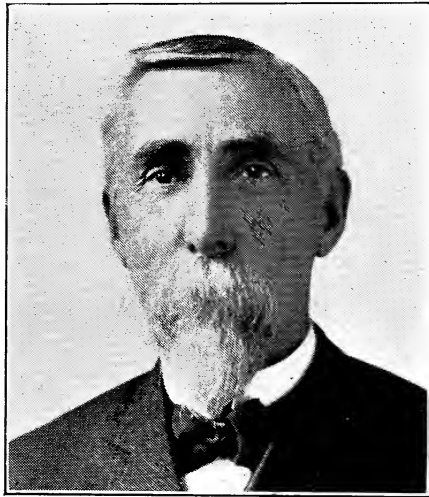
HENRY M. LELAND

GENERAL MANAGER,
CADILLAC MOTOR CAR COMPANY

BORN in Danville, Vt., February 16, 1843, son of Leander B. and Zylpha S. (Tift) Leland. Educated in the public schools of Millbury, Mass.

After leaving school, worked for a year making carriage wheels in Worcester, Mass. In 1859, was apprenticed to learn the machinist's trade with the George Crompton Loom Works, Worcester, Mass. From 1862 to 1865, worked at the U. S.

Armory, Springfield, Mass., and subsequently was for one year in Colt's Armory, Hartford, Conn., and machinist and tool maker in several shops at Worcester, Mass. In 1872, entered employ of Brown & Sharpe Mfg. Co., Providence, R. I. In 1890, removed to Detroit and entered the machine



business for himself, organizing the Leland & Faulconer Mfg. Co. In 1902, with others, organized the Cadillac Automobile Co., and in 1905 these companies were consolidated in the Cadillac Motor Car Co., of which Mr. Leland became General Manager.

Member of the National Association of Manufacturers, The National Founders' Association, The National Metal Trades Association and others.

Business address: Detroit, Mich.

Home address: Detroit, Mich.

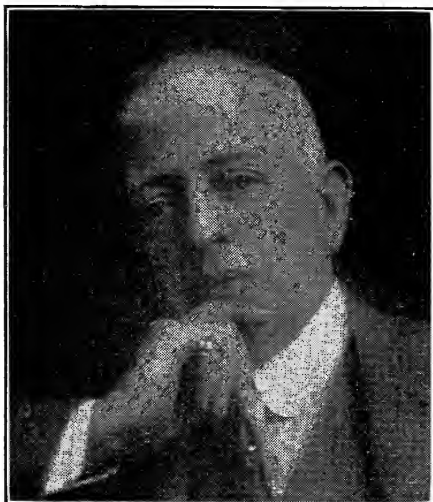
OGDEN P. LETCHWORTH

PRESIDENT,

PRATT & LETCHWORTH COMPANY

BORN in Auburn, N. Y., in 1851, son of George J. and Charlotte Letchworth. Educated at Auburn High School, and Williston Seminary, East Hampton, Mass.

At present, President of Pratt and Letchworth Co., and U. S. Hame Co.; Vice-President, Frazer and Jones Co.; Director, Great Lakes Engineering Works, Manu-



facturers and Traders National Bank, (Buffalo); Erie County Savings Bank, (Buffalo); Buffalo Brass and Copper Rolling Mill.

Member of Lodge of Ancient Landmarks, Buffalo, Saturn and Park Clubs, Buffalo; Royal Canadian Yacht Club, Toronto; Hamilton Club, Hamilton, Ontario; Transportation Club, New York; Railroad Club, New York. Trustee, Society of Prevention of Cruelty to Children, (Buffalo), and Buffalo Historical Society.

Business address: 189 Tonawanda St., Buffalo, N. Y.

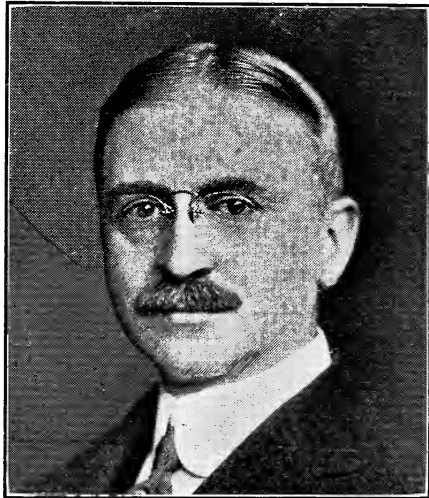
Home address: 605 Niagara St., Buffalo, N. Y.

JAMES LIPPINCOTT

VICE-PRESIDENT AND GENERAL MANAGER,
WEST LEECHBURG STEEL COMPANY

BORN in Pittsburgh, Pa., November 19, 1864, son of James and Maria (Davis) Lippincott. Educated in the public schools of Pittsburgh, Pa.

In the year 1882, entered the employ of the Pennsylvania Railroad Co., in the office of the Engineer of Maintenance of Way. After remaining with this company for three years, left in 1885 to accept a position with Carnegie Brothers and Co., Limited, under H. M. Curry, then Manager of Blast Furnaces. Resigned in 1888, to become Accountant for Kirkpatrick & Co., Limited, and the Chartiers Iron & Steel Co., (sheet steel manufacturers). In 1896, was appointed Secretary of Chartiers Iron & Steel Co. and Sales Agent,



Kirkpatrick & Co., Limited. Continued in the sheet steel business from April 1900 to November 1908, under their successors, the American Sheet Steel Co. and the American Sheet & Tin Plate Co. In 1898, with others, organized the West Leechburg Steel Co., Pittsburgh, Pa. and became its Secretary. In 1909, was elected Vice-President and General Manager of this company, which position he now holds.

Business address: P. O. Box 248, Pittsburgh, Pa.

Home address: 6217 Wellesley Ave., Pittsburgh, Pa.

JOHN THOMAS LLEWELLYN

VICE-PRESIDENT AND GENERAL MANAGER,
CHICAGO MALLEABLE CASTINGS COMPANY

BORN in Briton Ferry, Wales, July 7, 1863, son of Henry and Elizabeth (Gower) Llewellyn. Educated in the public schools of Milwaukee, Wis.

Began his business career at age of sixteen, in a minor position in the Milwaukee Works of the North Chicago Rolling Mill Co., which later became a part of the Illinois Steel Co., and during his fifteen year connection



with this company, was advanced through several grades to the position of Assistant General Sales Agent. In 1892, when the Milwaukee general offices of the company were moved to Chicago, became President and General Manager of the Belle City Malleable Iron Co., of Racine, Wis. In 1899, organized the Chi-

cago Malleable Castings Co., of which he is now Vice-President and General Manager. Also Director of the Roseland State Savings Bank, of Chicago, Ill.

Honorary member, Lincoln Road Association. Member of Kenwood Club, South Shore Country Club, Midlothian Country Club, Western Railway Club, of Chicago; member of the Wisconsin Society of Chicago. Member of Masonic Fraternity.

Business address: West Pullman, Ill.

Home address: Hotel Windermere, Chicago, Ill.

JAMES LORD

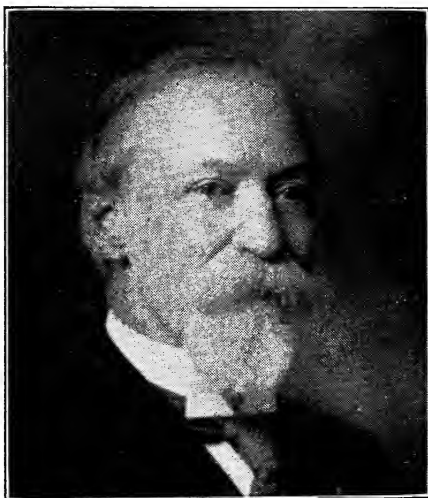
PRESIDENT,

AMERICAN IRON AND STEEL MANUFACTURING COMPANY

BORN in Camden, Delaware, May 18, 1844, son of James and Martha (Lockwood) Lord. Educated at St. John's College, Annapolis, Maryland.

In the period 1872-1882, was employed at the Reading Bolt and Nut Works; 1882 to 1899, was General Manager of the Pennsylvania Bolt & Nut Company. In September, 1899, became General Manager of the American Iron and Steel Manufacturing Company, organized at that time, to take over the Pennsylvania Bolt and Nut Co. and several other companies making bolts, nuts and rivets with plants in Reading and Lebanon, Pa.

In 1907, became President of the American Iron and Steel Manufacturing Company which position



he now holds. Also a Director of the Lebanon Trust Co.

Was Second Lieutenant and afterward Captain of Independent Company, Maryland Cavalry. Served with the Army of South-Eastern Virginia and was mustered out in August, 1865.

Member of Military Order of the Loyal Legion, and Order of Patriots and Founders of America. Director and Treasurer, Good Samaritan Hospital.

Business address: Lebanon, Pa.

Home address: Lebanon, Pa.

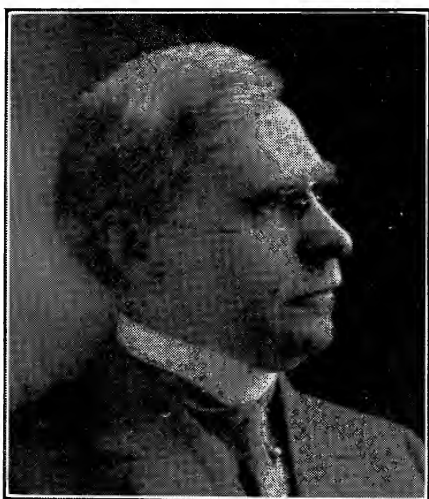
THOMAS LYNCH

PRESIDENT,

H. C. FRICK COKE COMPANY

BORN in Uniontown, Pa., in 1854, son of Patrick and Nancy (Daniel) Lynch. Educated in the public schools of Uniontown, Pa.

Commenced as a clerk in a country store in 1872 and later was employed for a year and a half in a wholesale grocery store in Pittsburgh. During 1875-76, was employed in company stores at the mines in the Con-



nellsville district. In 1877, was made Superintendent of a mine and coke plant of H. C. Frick & Co. In 1882, was appointed General Superintendent of the H. C. Frick Coke Co., and was promoted to the position of General Manager in 1890 and President in 1897. Has been President of the Company continuously since

that time. Also President, National Mining Co., United States Coal & Coke Co., and Bunsen Coal Co.

Business address: Carnegie Building, Pittsburgh, Pa.

Home address: Greensburg, Pa.

SAMUEL McCLURE

DIRECTOR AND GENERAL MANAGER,
STEWART IRON COMPANY, LIMITED

BORN in Little Beaver Township, Beaver Co., Pa., January 3, 1839, son of Joseph and Nancy (Clark) McClure. Educated in public schools, Beaver Co., and at Girard Academy, Girard, Pa.

In 1862, entered the employ of James Wood Sons & Co., of Pittsburgh, Pa., at their Homewood Furnace, Lawrence Co., Pa.; June 10, 1863, Assistant Manager of the Wheatland Furnace.

In 1870, made Manager of blast furnaces; January 10, 1874, made Superintendent of blast furnaces, muck bar and rolling mill of Stewart Iron Co., Limited, Sharon, Pa., and on August 1, 1876, became Agent and Manager of the company. In October 1889, with others, acquired all the stock of the Stewart



Iron Co., and became Director and General Manager. State Senator, Pennsylvania, 1885 and 1887. Inventor of improved fire brick and automatic stock indicator for blast furnaces.

Member of Iron and Steel Institute (Great Britain); American Institute of Mining Engineers. Masonic Fraternity. Member of Duquesne Club, Pittsburgh and Sharon Country Club (President).

Business address: Stewart Iron Co., Ltd., Sharon, Pa.

Home address: Sharon, Pa.

CYRUS H. McCORMICK

PRESIDENT,

INTERNATIONAL HARVESTER COMPANY

BORN in Washington, D. C., May 16, 1859, son of Cyrus H. and Nettie (Fowler) McCormick. Educated in public schools of Chicago, Ill., and Princeton University, A. M., 1879.

Became identified with the McCormick Harvesting Machine Co., in the fall of 1879, and filled various positions, both in the manufactory and in the office. Upon the death of his father in May, 1884, was made President of the company and held that office until 1902, when he became President of the International Harvester Co., which purchased the plant and business of the McCormick Harvesting Machine Co. In 1889, represented the McCormick Harvesting Co., at the Paris Exposition and received the decoration of Officier du Merite Agricole, a decoration rarely bestowed upon other than citizens of the French Republic. In 1900, again represented the McCormick Harvesting Co., at the Paris Exposition of that year and received the decoration of Officier du Légion d'Honneur de France.

Director of Merchants' Loan & Trust Co., Chicago; Chicago & Northwestern R. R.; and National City Bank of New York. Director of Field Museum of Natural History, the McCormick Theological Seminary of Chicago. Trustee of Princeton University and Lake Forest University. Member of Metropolitan and University Clubs, New York; Chicago and University Clubs, Chicago, and Chicago Athletic Association.

Business address: Harvester Building, Chicago, Ill.

Home address: 50 East Huron St., Chicago, Ill.

CHARLES H. McCULLOUGH, JR.

VICE-PRESIDENT AND GENERAL MANAGER,

LACKAWANNA STEEL COMPANY

BORN in Philadelphia, Pa., December 25, 1868, son of Charles H. and Elizabeth G. (Platt) McCullough. Educated at Stevens Institute of Technology, Hoboken, N. J. Degree of Mechanical Engineer.

Entered the employ of the Illinois Steel Co., in 1891, and remained with that Company until 1905, serving in various capacities up to that of 2nd Vice-President, which position he resigned in 1905 to become Vice-President and General Manager of the Lackawanna Steel Co., Buffalo, N. Y.

Member of Buffalo, Saturn, and Country Clubs, of Buffalo; Chicago Club, Chicago; Duquesne Club, Pittsburgh. Chi Phi Fraternity. Trustee of Charity Organization Society, and Christian Homestead Association, (Buffalo).



Business address: Lackawanna Steel Co., Buffalo, N. Y.

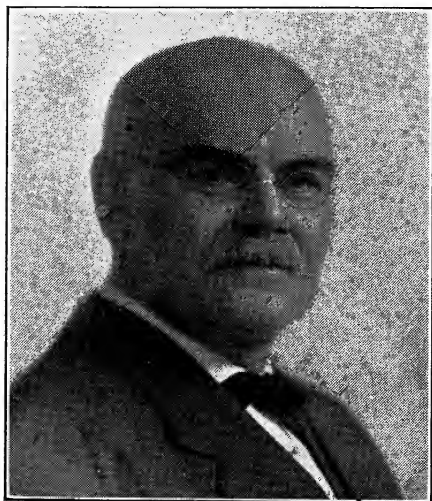
Home address: 68 Irving Place, Buffalo, N. Y.

THOMAS McDONALD

GENERAL SUPERINTENDENT, YOUNGSTOWN DISTRICT,
CARNEGIE STEEL COMPANY

BORN in Allegheny Co., Pa., November 11, 1848, son of Patrick and Christiana (Foster) McDonald. Educated in the public schools of Allegheny Co., and the Iron City Commercial College, Pittsburgh, Pa.

In 1868, started to learn the carpenter trade and in June 1875, began work for the Carnegie Co., as carpenter in the construction of the Edgar Thomson Works. In



March 1876, entered the Bessemer Department of the works, being promoted to Turn Foreman in June 1880 and to Night Superintendent in 1884. July 13, 1889, left the Carnegie Co., to take charge of the Bessemer Dept. of the Allegheny Bessemer Steel Co., at Duquesne, Pa., where he remained until February 1, 1893, when he

became General Superintendent, Ohio Steel Co., Youngstown, O. On January 1, 1907, was made General Superintendent of the Youngstown District, Carnegie Steel Co.

Member, American Institute of Mining Engineers; Engineers' Society of Western Pa.; Vice-Pres., Youngstown Chamber of Commerce. Member, Youngstown Club, Mahoning Golf Club, Youngstown and Duquesne Club, Pittsburgh.

Business address: Carnegie Steel Co., Youngstown, O.

Home address: 307 Madison Avenue, Youngstown, O.

WILLIAM HENRY McFADDEN

VICE-PRESIDENT AND GENERAL MANAGER,
MACKINTOSH, HEMPHILL & COMPANY

BORN in Moundsville, W. Va., June 11, 1870, son of Galbraith Stewart and Parmelia (Morton) McFadden. Educated in the public schools of Moundsville and at Lindsey Institute.

Started as a machinist's apprentice, with Mackintosh, Hemphill & Co., April 2, 1888; was made shop foreman in October, 1891; Shop Superintendent in June, 1893; General Superintendent of Mackintosh, Hemphill & Co., and General Superintendent of Star Tin Plate Co., in September, 1895; was made Vice-President, Director and General Manager of Mackintosh, Hemphill & Co., in 1903.

Has been actively engaged in the construction and erection of heavy rolling mill equipment during last ten years.

Past President of the American Foundrymen's Association, Pittsburgh Foundrymen's Association, Manufacturer's Association of Pittsburgh and Past Vice-President of the Steel Founders' Society of America.

Member of Duquesne and Union Clubs, Pittsburgh, and Pittsburgh Country Club.

Business address: 12th and Etna Streets, Pittsburgh, Pa.

Home address: 635 Sherwood Ave., Pittsburgh, Pa.



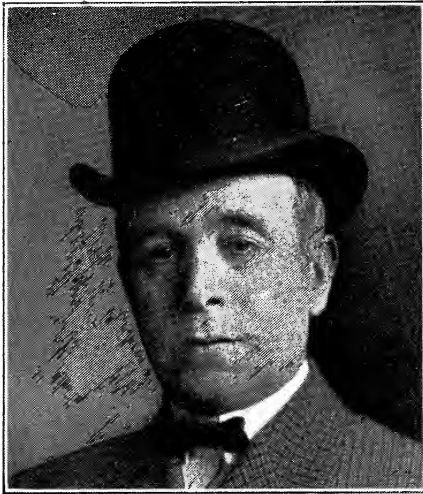
JOHN MCGINLEY

VICE-PRESIDENT AND GENERAL MANAGER

WEST PENN STEEL COMPANY

BORN in Londonderry, Ireland, son of Edward and Isabel (McLaughlin) McGinley. Educated in the public schools of Londonderry.

Entered the iron and steel business in 1878 in the employ of the Moss End Iron and Steel Company of Scotland, as weighmaster in the open hearth department. Left in 1885, in order to accept a position with Palmer



and Company, Limited, Jaro on Tyne, England, as Foreman of the open hearth department. Came to the United States in 1886 and entered the employ of Kirkpatrick and Co., and remained with the company until 1900, as Manager of the open hearth department. From 1900 to 1908, was General Superintendent of the operating department of the Allegheny Steel Co. In the latter year organized the West Penn Steel Co. and built the company's plant at Brackenridge, Pa. At present is Vice-President and General Manager of the company.

Member of the Engineers Society of Western Pennsylvania.

Business address: Brackenridge, Pa.

Home address: 544 Second Ave., Tarentum, Pa.

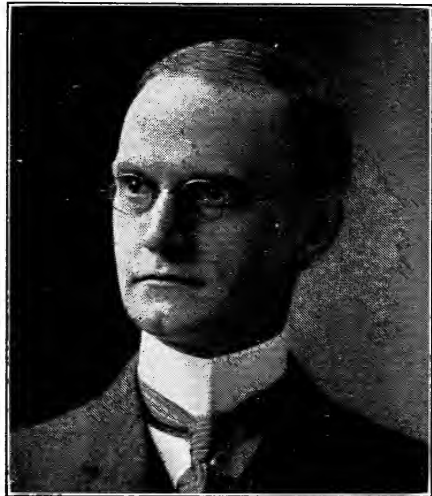
GEORGE FREDERICK MCKAY

PARTNER,

EDMUND W. MUDGE & COMPANY

BORN in Cleveland, Ohio, in 1861, son of John T. R. and Melissa (Black) McKay. Educated in private schools, Cleveland, Ohio; prepared for college but did not enter.

Down to 1900, was engaged in the railroad business and subsequently became associated with the iron and steel business as manager of traffic. Started in the General Freight Department of the Lake Shore and Michigan Southern Railway, serving successively as office boy, rate clerk, Secretary to the General Freight Agent, Chief Clerk of General Freight Department, and Division Freight Agent. For three years, 1897-1900, he was General Manager of the Erie Dispatch, Erie Railroad, and from 1903 to 1909, was traffic manager for the Lackawanna Steel Co. From 1902 to date, Traffic Manager for the Toledo Furnace Co. In 1909, became a member of the firm of Edmund W. Mudge & Co., of Pittsburgh and New York, and represents the firm in New York City.



Member of Railroad Club, New York; Duquesne Club, Pittsburgh; and Union Club, Cleveland.

Business address: 30 Church Street, New York.

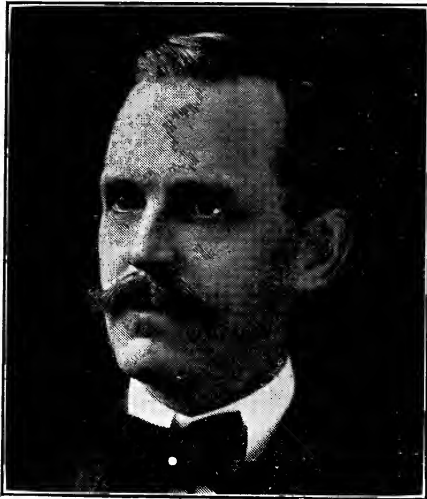
Home address: 1 West 81st Street, New York.

CHARLES EDWARD MCKILLIPS

SPECIAL AGENT,
CARNEGIE STEEL COMPANY

BORN in Philadelphia, Pa., July 25, 1862, son of James Baxter and Sarah Jane (Kerr) McKillips. Educated in the public schools of Philadelphia and Wrightsville, York Co., Pa.

Entered the service of the Pennsylvania Railroad as clerk in the freight and passenger office at Wrightsville, York Co., Pa., about the year 1878. On May 19, 1880,



entered the employ of The Lucy Furnace Co., Limited, as shipping clerk and telegraph operator at the Lucy Furnaces, and was promoted to the position of chief clerk in 1884. The Lucy Furnace Co., Limited, was merged into Carnegie, Phipps and Co., in 1886. In April 1889, was transferred to the Homestead Steel Works,

Munhall, Pa., as chief clerk. On July 1, 1901, was transferred to the general offices of the Carnegie Steel Co., at Pittsburgh, and appointed special agent in charge of Pig Iron and Scrap Supply. Has been continuously in the employ of the Carnegie interests and Carnegie Steel Co., from the year 1880.

Member of Union Club and Americus Club, Pittsburgh.

Business address: Carnegie Building, Pittsburgh, Pa.

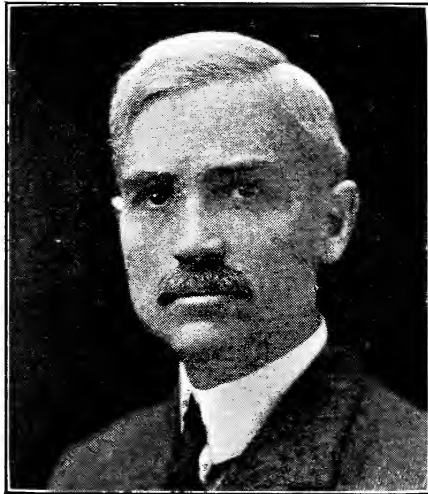
Home address: 311 Maple Ave., Edgewood Park, Pa.

WILLIAM CHARLES McMAHON

PRESIDENT AND GENERAL MANAGER,
BELLE CITY MALLEABLE IRON COMPANY

BORN in Pittsburgh, Pa., September 30, 1863, son of Robert W., and Ellen (Hurrell) McMahon. Educated in the public schools and high school, Pittsburgh, Pa.

Entered first the employ of the Pittsburgh Hinge Co., in 1880, and later in the same year, the service of the firm of Lewis, Oliver and Phillips. During the period, 1884 to 1890, was with J. H. McMahon & Co., Chain Manufacturers, and from 1890 to 1895, with the Phoenix Glass Co. Was for five years, 1895 to 1900, with the Oliver Iron & Steel Co., and from 1900 to 1905, was Assistant Manager of the Michigan Malleable Iron Co. and Manager of the Monarch Steel Castings Co. a subsidiary company of the Michigan Malleable Iron Co. Since 1906, with the Belle City Malleable Iron Co., of which he is President and General Manager. Also President of Racine Steel Castings Co., and Director of the Manufacturers National Bank of Racine, Wis.



Member of Detroit and Country Club of Detroit, Mich.; Hamilton and Engineers' Clubs, Chicago, Ill.; and Racine Country Club, Racine, Wis.

Business address: Racine, Wis.

Home address: 107 12th Street, Racine, Wis.

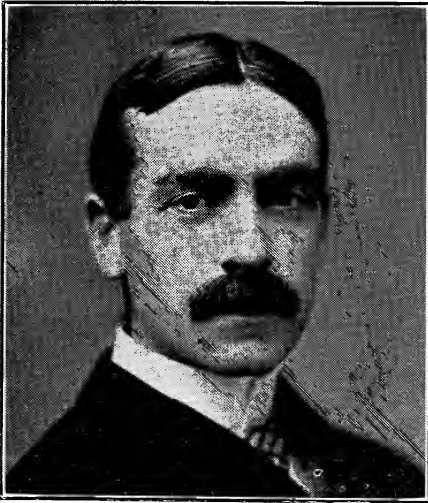
FRANCIS C. McMATH

PRESIDENT,

CANADIAN BRIDGE COMPANY

BORN in St. Louis, Mo., January 29, 1867, son of Robert E. and Frances (Brodie) McMath. Educated at Washington University, St. Louis, B. E., 1887.

Was assistant engineer of Detroit Bridge and Iron Works, 1887 to 1898, and in 1899, was made engineer of the same company. Since 1900, has been President of the Canadian Bridge Co. Also President of the Trussed



Concrete Steel Co., Limited, of Walkerville, Ontario; Director of the Structural Steel Co., Limited, of Montreal; and Vice-President of the St. Lawrence Bridge Co., Limited, of Montreal.

The St. Lawrence Bridge Company of Montreal is the company which recently received the contract from the Canadian Government for rebuilding the Quebec Bridge. This bridge will be the longest span cantilever bridge in the world, a double track structure built largely of nickel steel.

Member of Canadian Society of Civil Engineers and Detroit Engineering Society. Member of Detroit and University Clubs of Detroit. Trustee of Detroit University School and Director, Detroit Y. M. C. A.

Business address: Walkerville, Ontario.

Home address: 215 Iroquois Ave., Detroit, Mich.

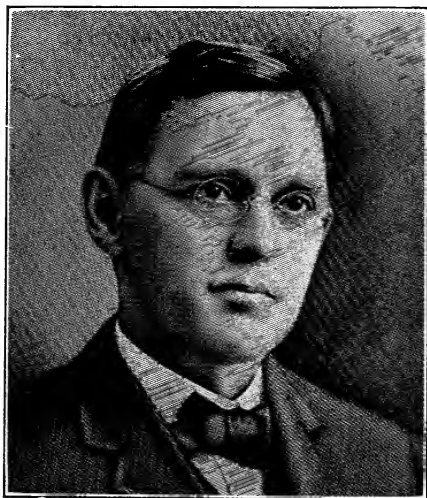
CLINTON SPAULDING MARSHALL

DISTRICT MANAGER, WORCESTER DISTRICT,
AMERICAN STEEL AND WIRE COMPANY

BORN in Rutland, Mass., February 6, 1860, son of George C. and Charlotte L. (Harrington) Marshall. Educated in the public schools of Worcester and at Wilbraham Academy, Wilbraham, Mass.

Started work with the Washburn & Moen Mfg. Co., December 1, 1879, and continued in their employ until January 31, 1882; with the Morgan Spring Co., Febru-

ary 1, 1882, to March 30, 1891; then returned to the Washburn & Moen Mfg. Co., and has continued with the company and with its successor, the American Steel & Wire Co., to the present time, being promoted through the grades of Superintendent, Spring Department; Asst. General Superintendent, South



Works; General Superintendent, South Works and District Manager, Worcester District. Director of Worcester Board of Trade.

Member of Worcester, Tatassit and Automobile Clubs, Worcester; Quinnipiack Club, New Haven, Connecticut. Member of the Masonic Fraternity and of Independent Order of Odd Fellows.

Business address: 94 Grove Street, Worcester, Mass.

Home address: 34 Institute Road, Worcester, Mass.

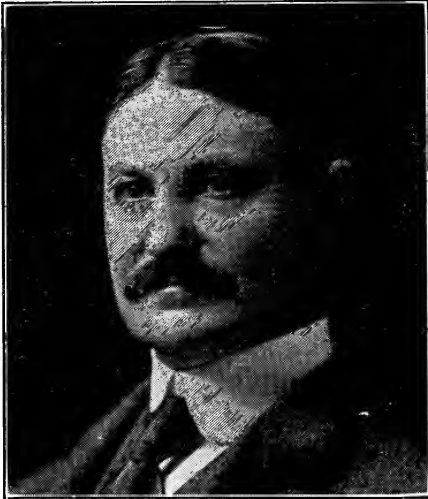
ROBERT MATHER

CHAIRMAN,

WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY

BORN in Salt Lake City, Utah, July 1, 1859, son of James and Margaret (Holt) Mather. Educated in public schools of Galesburg, Ill., and Knox College, Galesburg, A. B., 1882; A. M., 1885; LL.D., 1907.

Admitted to the bar in 1886 and began practice of law in Chicago. In 1889, became connected with legal department of Chicago, Rock Island & Pacific Ry. Co.,



and rose through various grades to the posts of Second Vice-President, General Counsel (1902), and First Vice-President, (1904). In 1904, became President and Chairman of Executive Committee of Rock Island Co. Was made Third Vice-President, St. Louis & San Francisco R. R., in 1903, and First Vice-President

in 1904. Also First Vice-President, Chicago & Eastern Illinois R. R., and Evansville & Terre Haute R. R., and Chairman St. Louis, Kansas City & Colorado R. R. In 1909, became Chairman, Westinghouse Electric & Manufacturing Co. Officer and Director in several industrial companies and banks. Trustee of Knox College.

Member of Chicago, Illinois and American Bar Associations. Member of many social clubs.

Business address: 165 Broadway, New York City.

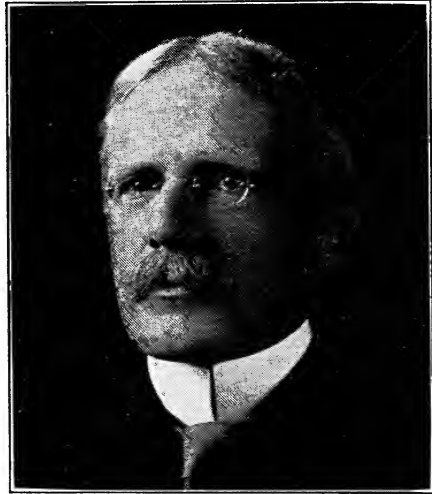
Home address: 113 East 37th St., New York City.

WILLIAM GWINN MATHER

PRESIDENT AND TREASURER,
THE CLEVELAND-CLIFFS IRON COMPANY

BORN in Cleveland, Ohio, September 22, 1857, son of Samuel Livingston and Elizabeth Lucy (Gwinn) Mather. Educated in Cheshire School, Cheshire, Conn., and graduate of Trinity College, B. A., 1877; M. A., 1880.

Entered business in the fall of 1878. Became Vice-President of The Cleveland Iron Mining Co., May 25, 1887, and was elected President of The Cleveland-Cliffs Iron Co., July 11, 1891, which position he now holds. Also President of the Lake Superior and Ishpeming Ry. Co., the Grand Island Steamship Co., the National Commercial Bank; Vice-President of the Citizen's Savings and Trust Co., and the Pioneer Iron Co.; and Director and officer of various other companies.



Member of American Institute of Mining Engineers, Lake Superior Mining Institute, and American Forestry Association. Member of Union and University Clubs, Cleveland; Duquesne Club, Pittsburgh; Chicago and University Clubs, Chicago; University Club, New York. Psi Upsilon Fraternity. Trustee of Trinity College, Hartford, Conn.; Adelbert College, Case School Corporation and Lakeside Hospital, Cleveland, Ohio.

Business address: Rockefeller Bldg., Cleveland, O.
Home address: Lake Shore Boul., Cleveland, O.

THOMAS HERBERT MATHIAS

ASSISTANT GENERAL SUPERINTENDENT,
LACKAWANNA STEEL COMPANY

BORN in Hamilton, Ontario, Canada, May 24, 1869, son of David S. and Tryphena (Jones) Mathias. Educated in the public schools of Rosedale, Kansas, and Chicago, Illinois.

In 1886, entered the employ of the North Chicago Rolling Mill Company as apprentice at its South Chicago Works, which were subsequently taken over by the Illinois Steel Company.



In 1891, was placed in charge of roll designing and roll turning at these works and continued in this position until January, 1905, when he resigned to accept a similar position with the Lackawanna Steel Company, at Buffalo, N. Y. In January, 1909, was promoted to the position of Assistant

General Superintendent of the Lackawanna Steel Company which position he continues to hold.

Belongs to a remarkable steel family: his father, D. S. Mathias, being with the Illinois Steel Co; his brother, D. R. Mathias, Genl. Supt of Joliet Works; and another brother, W. G. Mathias, Asst. Genl. Supt. of Tennessee, Coal, Iron and Railroad Co., Ensley, Ala.

Member of the Buffalo Club, Buffalo, N. Y.

Business address: Lackawanna Steel Co., Buffalo, N. Y.

Home address: 176 Dorchester Road, Buffalo, N. Y.

DANIEL BROWNSON MEACHAM

PARTNER,
ROGERS, BROWN & COMPANY

BORN in Pulaski, New York, November 19, 1851, son of Daniel B. and Eunice S. (Forbes) Meacham. Educated at Pulaski Academy and graduate of Starling Medical College, Columbus, Ohio, M. D., 1874.

In June 1882, became Secretary, and later Vice-President and General Manager of the Norton Iron Works, Ashland, Ky., and managed this company until 1889, when he became

a member of the firm of Rogers, Brown & Meacham, doing business in St. Louis, Mo. In 1891, became a member of the firm of Rogers, Brown & Co., and returned to Cincinnati. Also President, The Hanging Rock Iron Co.; Vice-President, Cleveland Furnace Co., and The Union Furnace



Co.; Director, Iroquois Iron Co., Empire Steel and Iron Co., Rogers, Brown Ore Co., and Detroit Furnace Co.

Member, American Institute of Mining Engineers. Member of Commercial, Optimists, Queen City, Country, Hamilton Co. Golf, City, and Business Men's Clubs, Cincinnati, Ohio. President, Cincinnati Y. M. C. A.; Trustee Avondale Presbyterian Church; Director, Citizens' Mortgage Loan Co. and Union Bethel.

Business address: Carew Building, Cincinnati, Ohio.

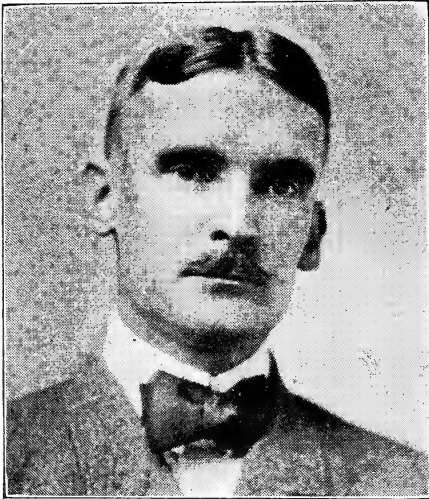
Home address: 3901 Reading Road, Cincinnati, Ohio.

AUGUSTUS F. MEEHAN

VICE-PRESIDENT AND GENERAL MANAGER,
ROSS MEEHAN FOUNDRY COMPANY

BORN in Covington, Kentucky, February 17, 1872, son of James and Eleanor Lee (Childs) Meehan. Graduate of Notre Dame University, 1890.

From 1890 to 1894, was Secretary and Treasurer of the Southern Malleable Iron Co.; 1894-1895, General Manager of the Elliott Car Co., Gadsden, Alabama. Left Alabama in 1895, to develop mining and foundry



business in Mexico and during the period 1895-1903, was President and General Manager of the Monterey Foundry Co., Monterey, Mexico, and engaged in mining and smelting in Mexico. Since 1903, Vice-President and General Manager of the Ross-Meehan Foundry Co., Chattanooga, Tenn. In 1906, President of the

Chattanooga Chamber of Commerce. Also Vice-President and General Manager, Southern Malleable Iron Co.; President, Chattanooga and Montlake Railway Company; Director, Montlake Coal Company, and Hamilton National Bank, Chattanooga.

Member of Mountain City Club, Chattanooga; Chattanooga Golf and Country Club; and Casino Club, Monterey, Mexico.

Business address: Chattanooga, Tenn.

Home address: Chattanooga, Tenn.

GEORGE MESTA

PRESIDENT,
MESTA MACHINE COMPANY

BORN in Bethel Township, Allegheny Co., Pa., March 31, 1864, son of Henry and Anna (Gerhold) Mesta. Educated in the public schools of Bethel Township, Bethel Academy and graduate, Western University of Pennsylvania Engineering School, Class of 1885.

In 1886, engaged as Engineer with Totten & Co., Pittsburgh, Pa., designing engines and rolling mill machinery. In 1887, organized the Leechburg Foundry & Machine Co., and became Vice-President and General Manager of the company. In 1889, was elected President of the company. In 1898, organized the Mesta Machine Co., became President of the same and started the building of the present plant at West Homestead, Pa. In the latter part of 1898, the Mesta Machine Co. purchased the plants of the Leechburg Foundry & Machine Co. and the Robinson Rea Mfg. Co. of Pittsburgh, Pa.

Member of American Society of Mechanical Engineers, American Institute of Mining Engineers and Engineers Society of Western Pennsylvania. Member of Engineers and Machinery Clubs, New York; Duquesne, Union, University, and Country Clubs, Pittsburgh; etc.

Business address: Oliver Bldg. Pittsburgh, Pa.

Home address: West Homestead, Pa.

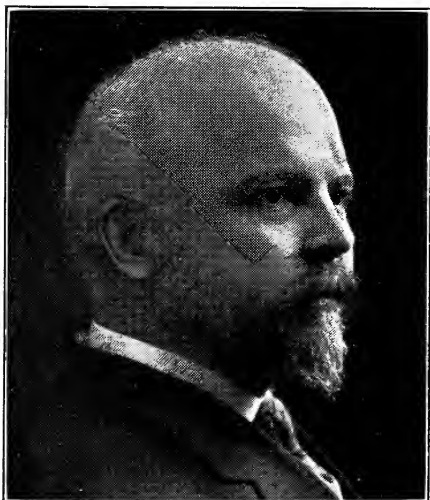


CHARLES LEWIS MILLER

VICE-PRESIDENT AND GENERAL SUPERINTENDENT,
AMERICAN STEEL AND WIRE COMPANY

BORN in Reading, Pa., September 30, 1861, son of Christian and Wilhelmina (Stein) Miller. Educated in public schools of Brooklyn, N. Y. Graduate of Columbia University, E. M., 1885.

Entered the iron and steel business early in 1886 as assistant chemist at the Edgar Thomson Works of the Carnegie Steel Co. Later became Assistant Superin-



tendent of the Carbon Iron and Steel Co., Parryville, Pa., and subsequently Superintendent of Missouri Furnace Co., St. Louis, Mo. In 1890, entered the service of the Illinois Steel Co., and occupied various positions as Blast Furnace and Steel Works Superintendent with the company until 1899, when he entered

the service of the American Steel and Wire Co., and in 1900, became General Superintendent of the company, and in 1905, Vice-President and General Superintendent.

Member of American Institute of Mining Engineers. Member of Duquesne and Union Clubs, Pittsburgh, Pittsburgh Athletic Assn.; Chicago Athletic Assn.; Union Club, Cleveland; and Engineers' Club, New York.

Business address: Frick Building, Pittsburgh, Pa.

Home address: 1086 Shady Avenue, Pittsburgh, Pa.

JOHN MITCHELL

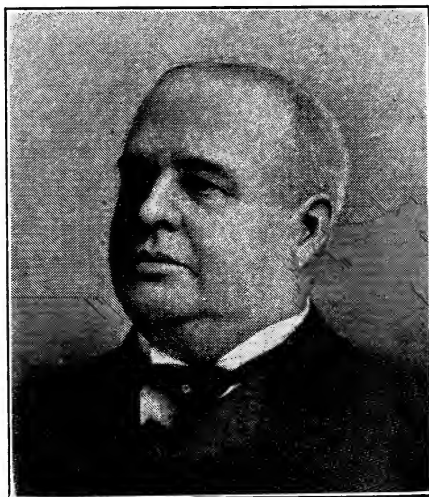
PRESIDENT,

CLEVELAND STEAMSHIP COMPANY

BORN in Clinton County, New York, October 8, 1850, son of Daniel and Calista (Rosbery) Mitchell. Educated in public schools.

Started at age of 14 as boy on a vessel on the Lakes and worked up to the position of Master of a Steamer. Invested his savings in shipping property and in 1887, retired from active service on the Lakes in order to look

after the management of the vessels owned by his company. In 1890, established the brokerage firm of Mitchell & Co., at Cleveland, Ohio, and continued to purchase vessels until today they have nineteen steamers. Also owns large interests in Pacific Portland Cement Co., the Western Sugar Refining Co., and in coal,



iron and copper lands in various parts of the United States. President of the Huron Iron Mining Company of the Miller Ore Company, and the Lake View Land and Improvement Company; Director of the Pittsburgh Ore Company, the Groveland Iron Mining Company and the First National Bank of Cleveland, Ohio.

Member of several clubs, the Ohio Society of New York and is a Thirty-second degree Mason and Shriner.

Business address: Rockefeller Bldg., Cleveland, O.

Home address: 10008 Euclid Ave., Cleveland, O.

RALPH DANIEL MITCHELL

DIRECTOR,

CLEVELAND STEAMSHIP COMPANY

BORN in Marine City, Mich., December 5, 1878, son of John and Mary (Rouvel) Mitchell. Educated in University School, Cleveland; Phillips Academy, Andover Mass., and graduate of Sheffield Scientific School, Yale University, Ph. B., 1902.

Engaged in the Lake Shipping business with his father, John Mitchell, in September, 1902, and has re-



mained with him since that time. Is Director of the Cleveland Steamship Company, the Automatic Sounding Machine Company and the Edward Manufacturing Company; Secretary of the Miller Ore Company.

Member of the Union Club, Tavern Club and Euclid Club, of Cleveland, and Cleveland Chamber of Commerce. Member of Book and Snake Society, Yale University.

Business address: 948 Rockefeller Building, Cleveland, O.

Home address: 8715 Carnegie Ave., Cleveland, O.

VAN ZANDT MUMFORD MOORE

SECRETARY AND GENERAL MANAGER,
CHISHOLM AND MOORE MANUFACTURING COMPANY

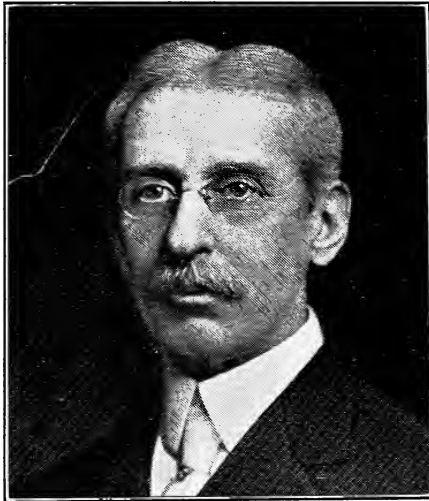
BORN at Newtown, Long Island, New York, September 12, 1851, son of Samuel H. and Elizabeth Ann (Sammis) Moore. Educated in Fairchild's Institute, Flushing, N. Y., and the Brooklyn Polytechnic Institute.

Was first employed in his father's store. After seven years the family moved West, first to Madison, Wis., and soon after to Chicago, where with his father and

brother he organized the firm of S. H. and E. Y. Moore, dealers in wholesale hardware and iron.

In 1888, they removed to Milwaukee, the business being reorganized in the Moore Manufacturing and Foundry Co., of which the subject of this sketch was Secretary and Treasurer.

In 1897, the business was again moved, this time to



Cleveland, Ohio, and reorganized as the Chisholm and Moore Manufacturing Co., of which Mr. Moore is Secretary and General Manager. The company manufactures chain hoists, trolleys, and other specialties.

Member, Colonial, Mayfield Country, Athletic, Automobile, and Aero Clubs of Cleveland; Cleveland Chamber of Commerce, and Merchants' Marine League.

Business address: Cleveland, O.

Home address: 9400 Euclid Ave., Cleveland, O.

EDMUND WEBSTER MUDGE

CHAIRMAN OF BOARD OF DIRECTORS,
PHILLIPS SHEET AND TIN PLATE COMPANY

BORN in Philadelphia, Pa., January 12, 1870, son of Thomas Henry and Mary Emma (Sheppard) Mudge. Educated in the Friends school of Woodstown, N. J.

President of Edmund W. Mudge and Company, dealers in pig iron and coke, Pittsburgh, Pa., and President of the Youghiogeny and Cheat River Railroad Company; Treasurer of the L. P. Seeley Company, and



of Trimble, Mudge and Company; Chairman of the Board of Directors of the Phillips Sheet and Tin Plate Company, and Director of the Pope Tin Plate Company, the North Preston Coal Company, the Pennfield Coal and Coke Company, the Pittsburgh Stove and Range Company, and the Columbia National Bank of

Pittsburgh. Also connected with the Lackawanna Steel Company, the La Belle Iron Works and the Lincoln Coal and Coke Company.

Member of the Duquesne Club, Union Club, Press Club, Automobile Club, Country Club, and Pittsburgh Athletic Association of Pittsburgh; Union Club, Cleveland, and Chicago Athletic Association, Chicago, Ill.

Business address: Frick Building, Pittsburgh, Pa.

Home address: 5814 Forbes Street, Pittsburgh, Pa.

TRUMAN HANDY NEWBERRY

DIRECTOR,

THE CLEVELAND-CLIFFS IRON COMPANY

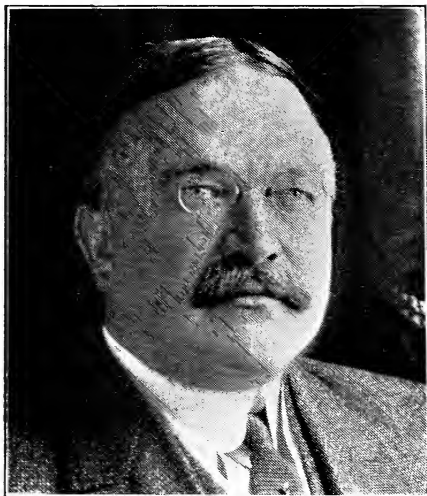
BORN in Detroit, Michigan, November 5, 1864, son of John S. and Helen P. (Handy) Newberry. Graduate of Yale University, Ph.B., 1885; A. M., 1910.

During period 1886-1888, was General Passenger and Freight Agent for D. B. C. & A. Ry.; from 1888 to 1902, President of the Detroit Steel and Spring Co.; and from 1902 to 1905, President Detroit Steel Casting Co. Now Vice-President, Newberry Furnace Co.; Treasurer, O. & W. Thurn Co.; Director, The Cleveland-Cliffs Iron Co., Packard Motor Car Co., Michigan State Telephone Co., and various banks and trust companies in Detroit.

Served in Spanish War as Acting Lieutenant, U. S. Navy on U. S. S. Yosemite; Assistant Secretary of the Navy, 1905-08; Secretary of the Navy, 1908-09. Member of Society of Naval Architects. Member of Union, University, and N. Y. Yacht Clubs, New York; Chicago Club, Chicago; Metropolitan, Army and Navy, and Chevy Chase Clubs, Washington; Yondotega, Detroit Country Club, etc., Detroit. Delta Psi Fraternity. Vice-President and Trustee of Grace Hospital, Detroit.

Business address: 1224 Ford Bldg., Detroit, Mich.

Home address: Grosse Pointe Farms, Wayne Co., Mich.

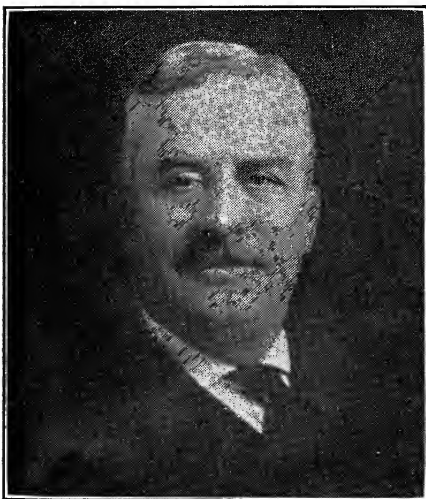


ROBERT WASHINGTON NEY

MANAGER WIRE MILLS, CLEVELAND DISTRICT,
AMERICAN STEEL AND WIRE COMPANY

BORN in New York City, February 22, 1855, son of Elemier J. and Mary (Alexander) Ney. Educated in the public schools of Lowell, Mass., and Brooklyn, New York.

Entered employ of Washburn-Moen Manufacturing Co., April 19, 1879, at North Works, Worcester, Mass., was transferred to the South Works in January, 1880, and



made a foreman in the annealing and cleaning house. Worked through various departments at these works until April, 1889, when he was transferred to the North Works, and placed in charge of the fine wire and copper departments. In October, 1891, was transferred to the Waukegan Works, and was in charge of

manufacturing during construction period and starting of the works. June 1, 1898, became Superintendent, American Works, Cleveland, Ohio, for the American Steel & Wire Co.; July 1, 1899, became Assistant Manager, Cleveland District and November 1, 1903, Manager of Wire Mills, Cleveland District.

Member of Euclid, Union, Rowfant and Country Clubs, of Cleveland. Masonic Fraternity and Odd Fellows.

Business address: Cleveland, Ohio.

Home address: 1818 East 82nd St., Cleveland, O.

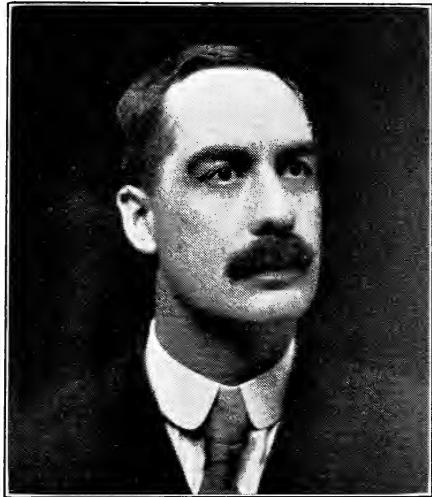
FRANCIS EMBURY NORRIS

SUPERINTENDENT, SOUTH SHARON AND SHARON WORKS,
CARNEGIE STEEL COMPANY

BORN in London, England, February 14, 1871, son of Daniel and Mary Ellen (Hester) Norris. Educated in King's College School, London, and at School of Mines, Berlin, Germany.

Was first employed in the Phoenix Steel Works, Ruhrort, Germany, 1889-91, leaving the company in order to complete his education at School of Mines. In

1895, entered the employ of the Troy Steel Co., Troy, N. Y., remaining until 1898; 1899-1901, with the National Transit Co., as inspector of steel; since 1901, with the Sharon Steel Co., South Sharon, Pa., and its successor, the Carnegie Steel Co. In 1902, the Sharon Steel Company was acquired by the United States Steel



Corporation by purchase and the operation of the works placed in the hands of the Carnegie Steel Company. After filling several minor positions, Mr. Norris on January 1, 1907, was made Superintendent of the South Sharon plant and also that at Sharon. Also Director of Colonial Trust Co., South Sharon.

Member of Verein Deutscher Eisenhuettenleute. A thirty-second degree Mason.

Business address: South Sharon, Pa.

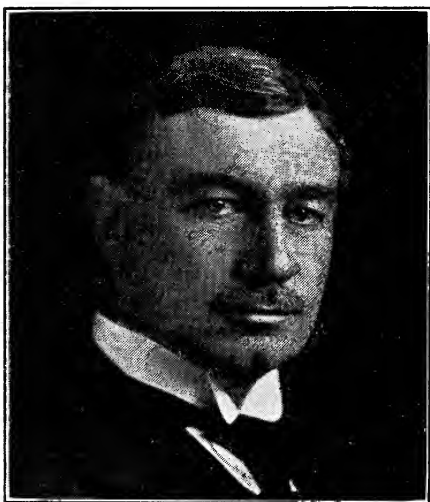
Home address: 7 Prindle Avenue, Sharon, Pa.

RUDOLPH ORTMANN

PRESIDENT,
AJAX FORGE COMPANY

BORN in Vienna, Austria, June 21, 1864, son of Charles L. and Marie (Bock) Ortmann. Educated in public schools of Saginaw and Detroit, Michigan, and at the Politechnikum, Vienna, Austria.

Entered the employ of the Ajax Forge Co., as time-keeper in 1885, and has occupied various positions in that company since that time, becoming President of the company in 1908. In



1893, became Assistant Treasurer of the Griffin Wheel Company, and was successively promoted through several positions to the office of Vice-President in 1900. In 1909, was elected President of the Sellers Manufacturing Co., which operates a rolling mill at Chicago, and in 1910 was elected

President of the Edgar Allen American Manganese Steel Co. Continues to be active in the management of each of the four companies named.

Member of Chicago, Union, Chicago Athletic, Chicago Golf, South Shore Country, Glenview, and Saddle and Cycle Clubs of Chicago, Ill.; the Railroad Club, New York and the Automobile Club of America.

Business address: McCormick Bldg., Chicago, Ill.

Home address: 669 Lincoln Parkway, Chicago, Ill.

EDWARD O'TOOLE

GENERAL SUPERINTENDENT,
UNITED STATES COAL AND COKE COMPANY

BORN in Salineville, Columbiana Co., Ohio, December 27, 1866, son of Edward and Margaret (Collins) O'Toole. Educated in public schools of Salineville, O.

In March, 1892, became connected with the H. C. Frick Coke Co., as fire boss, became mine foreman, June '95, Superintendent in June '98 and upon the formation of the U. S. Steel Corporation, was made Division Superintendent, in charge of the American Coke Co., Eureka Fuel Co., and Continental Coke Co., then under construction. In the fall of 1903 jurisdiction extended to all mines of the H. C. Frick Coke Co. In July, 1904, appointed General Superintendent of the United States Coal and Coke Co., Gary, West Virginia. Also Director of Gary National Bank, Central Pocahontas Coal Co., Crystal Block Coal & Coke Co., etc.



Colonel of Staff of Gov. Dawson, 1906-09. At present Brigadier General of Staff of Governor Glasscock.

Member Amer. Institute of Mining Engineers, American Mining Congress, Coal Mining Institute of America. Member Elks Fraternity. President of School Board, Adkin District, McDowell Co., W. Va.

Business address: Gary, McDowell Co., West Va.

Home address: Gary, McDowell Co., West Va.

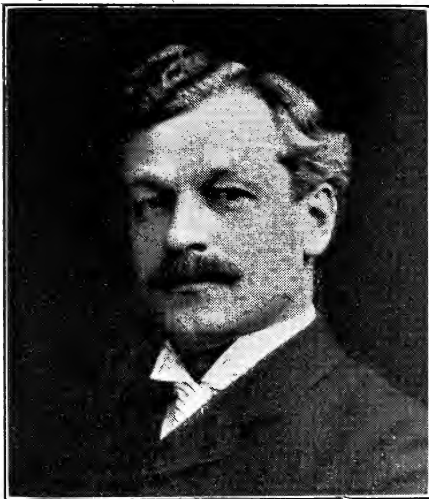
WILLIAM PENDLETON PALMER

PRESIDENT,

AMERICAN STEEL AND WIRE COMPANY

BORN in Pittsburgh, Pa., June 17, 1861, son of James Stewart and Eleanor (Pendleton) Palmer.

In 1881, entered the employ of the Carnegie interests, and was successively Secretary and General Sales Agent of Carnegie, Phipps & Co., General Sales Agent and Assistant to President, Carnegie Steel Co. Left the Carnegie Co., February 1, 1896, and became Second



Vice-President of the Illinois Steel Co., remaining until December 20, 1898, when he became associated with the American Steel & Wire Co., of New Jersey, as General Manager and later as President. President and Director of several subsidiary companies of the American Steel & Wire Co.; Director of Trenton

Iron Co., National Bank of Commerce, Cleveland, and Cleveland Trust Co.

Member of American Society of Civil Engineers; Engineers and Railroad Clubs, New York; Union, Rowfant, Country, Tavern, Hermit, Mayfield and Euclid Clubs, Cleveland; Chicago Club, Chicago; Duquesne and Pittsburgh Clubs, Pittsburgh. Trustee of Lakeside Hospital, Case Library and Western Reserve Hist. Soc.

Business address: Cleveland, Ohio.

Home address: Euclid Heights, Cleveland, O.

EUGENE WILLIAM PARGNY

PRESIDENT,

AMERICAN SHEET AND TIN PLATE COMPANY

BORN in Louisville, Kentucky, June 5, 1866, son of Joseph and Louise (Benier) Pargny. Educated in public and private schools of Louisville, Ky.

In 1890, became associated with the Apollo Iron & Steel Co., and after a few years was appointed Purchasing Agent and subsequently General Sales Agent, holding this dual position until April, 1900, when the company was absorbed by

the American Sheet Steel Co. Was then made Manager of the Kiskiminetas Valley Mills, including Vandergrift, Leechburg, Hyde Park and Saltsburg Works. When the American Sheet Steel and American Tin Plate Companies were merged in 1904, he became 2nd Vice-President and Gen-



eral Manager of Sales of the new company, the American Sheet & Tin Plate Co. In 1906, he was made 1st Vice-President and on January 1, 1909, President.

Member of Engineers' Society of Western Pa.; Engineers' and Railroad Clubs, New York; Americus, Automobile, Duquesne, Pittsburgh, Pittsburgh Athletic, University, Country and Allegheny Country Clubs, Pittsburgh; Pittsburgh Chamber of Commerce.

Business address: Frick Building, Pittsburgh, Pa.

Home address: Beechwood Boul., Pittsburgh, Pa.

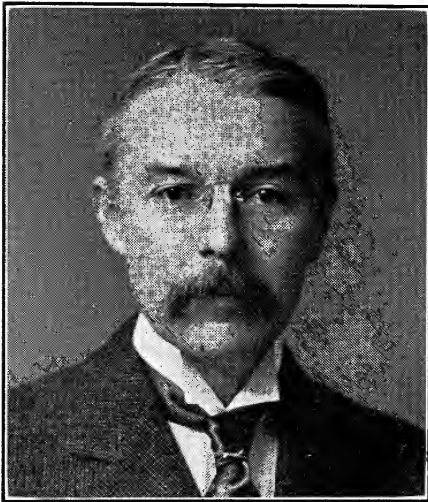
LEONARD PECKITT

PRESIDENT,

EMPIRE STEEL AND IRON COMPANY

BORN at Carlton Hall, Yorkshire, England, April 17, 1860, son of Leonard F. and Frances (Quickfall) Peckitt. Educated by private tutor and later at Masham Grammar School, ending in a four years' course in chemistry under Prof. W. F. Stock, County Analyst, Darlington.

Came to America in 1882, served six years as chemist for Reading Iron Works, Reading, Pa.; 1888-1890,



was chief chemist at Crane Iron Works, Catasauqua, Pa.; 1890-1899, was successively Assistant Superintendent, Superintendent, General Manager, Vice-President and President of the Crane Iron Co. In 1899, took an active part in the formation of the Empire Steel and Iron Co., which took over the Crane Iron Works and other

properties in New Jersey and Eastern Pennsylvania, was the first President of the company, serving continuously in that capacity to the present time. Officer and Director of several affiliated companies.

Fellow of Chemical Society of London; member, Iron & Steel Institute of Great Britain, and American Institute of Mining Engineers. In 1910, was President of the Eastern Pig Iron Association.

Business address: Catasauqua, Pa.

Home address: Catasauqua, Pa.

JOHN AUGUSTUS PENTON

PRESIDENT,
PENTON PUBLISHING COMPANY

BORN in Paris, Ontario, Canada, May 12, 1863, son of Thomas and Anna (Ryall) Penton. Educated in the public schools of Sarnia, Ontario.

From 1879 to 1883, served his apprenticeship as an iron-molder in Sarnia, Ontario and subsequently worked at this trade in several places in the United States for a number of years. Started in the publishing business in

September, 1892, with a periodical devoted to the foundry trade, The Foundry. Later became interested in The Marine Review and The Iron Trade Review in Cleveland, Ohio, and in September, 1904, organized the Penton Publishing Company to consolidate all these interests. This company now publishes



all of the above mentioned periodicals and also Power Boating, Penton's List, the Blue Book of American Shipping, Penton's Foundry List, etc.

Took an active part in the formation of the National Foundry Association, serving as Secretary from 1896 to 1903. Secretary of the Merchant Marine League of the United States from the time of its formation on November 21, 1904, to the present time.

Business address: Penton Building, Cleveland, O.

Home address: Euclid Villa, Cleveland, Ohio.

GEORGE WALBRIDGE PERKINS

DIRECTOR,

UNITED STATES STEEL CORPORATION

BORN in Chicago, Ill., January 31, 1862, son of George Walbridge and Sarah L. (Mills) Perkins. Educated in public schools of Chicago.

Began as office boy in Chicago office of N. Y. Life Ins. Co., becoming later, cashier and inspector of agencies; in 1889, became Superintendent of the Western Dept., and in 1892, 3rd Vice-President in charge of



agencies, with headquarters in New York. Promoted to 2nd Vice-President in 1898 and Vice-President in 1903. Chairman of the Finance Committee in 1900. Partner in the banking firm of J. P. Morgan & Co., in 1901. Retired from banking business in 1910. Chairman, C. B. & Q. R. R.; Chairman, Cin-

cinnati, Hamilton & Dayton R. R. and Pere Marquette R. R.; Chairman, Finance Com., International Harvester Co.; Director, U. S. Steel Corp'n, Northern Pacific Ry. Co., National City Bank, Astor Trust Co., Bankers Trust Co. and a large number of other companies.

Trustee of Vassar College. Member of Union League, Metropolitan, N. Y. Yacht, Merchants, Country and Ardsley Clubs, New York.

Business address: 71 Broadway, New York.

Home address: Riverdale-on-Hudson, New York.

HERBERT FARRINGTON PERKINS

PRESIDENT,

WISCONSIN STEEL COMPANY

BORN in Constantinople, Turkey, October 18, 1864, son of George Augustus and Sarah Elizabeth (Farrington) Perkins. Educated at Phillips Andover Academy and Yale College, A. B., 1887.

From 1887 to 1898, was with the National Malleable Castings Co., Chicago Works, and worked up from clerk to Assistant Treasurer. Left in 1898 to become Manager of Purchasing Department, McCormick Harvesting Machine Co. At formation of International Harvester Co., organized the General Purchasing Dept. of that company. Later became Manager of the Steel Dept. and afterward President of the Wisconsin Steel Co., organized to conduct the Steel Department. Also



President of the Wisconsin Lumber Co., and Division Manager of International Harvester Co., having supervision of purchase of raw materials. Director of Continental and Commercial National Bank, Chicago Savings Bank & Trust Co., and United Coal Mining Co.

Member of Chicago, Yale, University and Glen View Golf Clubs of Chicago.

Business address: Harvester Building, Chicago, Ill.

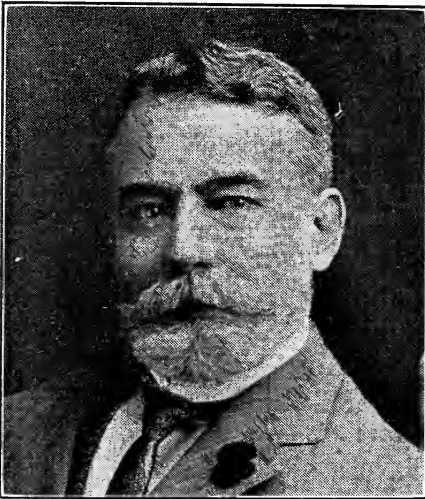
Home address: 6106 Kenmore Avenue, Chicago, Ill.

ANTONIO CHARLES PESSANO

PRESIDENT AND GENERAL MANAGER,
GREAT LAKES ENGINEERING WORKS

BORN in Philadelphia, Pa., July 3, 1857, son of Antonio D. and Elizabeth (Ogden) Pessano. Educated in the public schools of Philadelphia with technical education by private teachers, and course at Franklin Institute.

Built the Cresson Works at Philadelphia, becoming Vice-President and General Manager of the company. In 1902, sold interest in Cresson Co., and with others



bought the Riverside Iron Works, Detroit and later developed the Great Lakes Engineering Works with plants at Detroit, Ecorse and St. Clair, Michigan, and at Ashtabula, Ohio.

One of the incorporators, and on first Board of Directors of Board of Commerce, Detroit. Member of Amer. Society of Mechanical Engineers,

Society of Naval Architects and Marine Engineers, Detroit Engineering Society. Past President, National Founders Assn.; member, National Metal Trades Assn., Chamber of Commerce, Ashtabula, Ohio., National Assn. of Manufacturers, Employers Assn. of Detroit. Member, Engineers Club, New York; Union Club, Cleveland; Detroit Club, Grosse Pointe Country Club. Vice-President and Trustee, Solvay General Hospital.

Business address: Detroit, Michigan.

Home address: 652 Jefferson Avenue, Detroit, Mich.

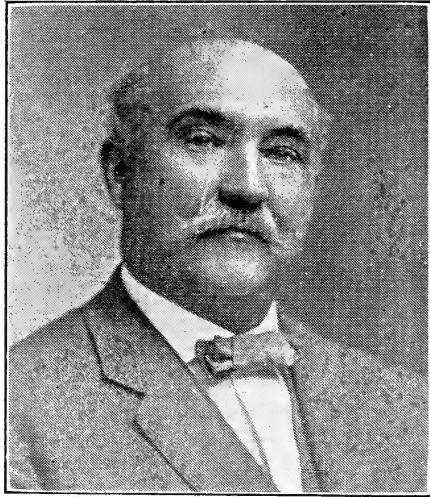
JOHN OSBORNE PEW

VICE-PRESIDENT AND GENERAL MANAGER,
THE YOUNGSTOWN IRON AND STEEL COMPANY

BORN in Brookfield, Trumbull County, Ohio, in 1854, son of S. H. and Nancy Ann (Osborne) Pew. Educated in the public schools of Niles, Ohio.

After completing his education, was engaged in the iron and steel roofing business in Niles, Ohio. Later removed to Youngstown, Ohio, where he became one of the organizers of The Youngstown Iron and Steel Roofing

Co. in 1894, and was elected Vice-President and General Manager of the company. The name of the company was subsequently changed to The Youngstown Iron and Steel Co. Was also one of the organizers of The Marsh-Capron Manufacturing Co. and was elected Vice-President and Director of that company.



Now Vice-President and Director, The Youngstown Iron and Steel Co.; Vice-President and Director, The Marsh-Capron Manufacturing Co.; and Director of the Commercial National Bank of Youngstown, Ohio.

Member of the Youngstown Club, Youngstown, Ohio; Union Club, Cleveland, Ohio; and The Ohio Society of New York. A thirty-second degree Mason.

Business address: Youngstown, Ohio.

Home address: 33 Scott St., Youngstown, Ohio.

WILLIAM STOCKMAN PILLING

PARTNER,
PILLING & CRANE

BORN in Philadelphia, Pa., February 19, 1857, son of George Platt and Tamazine Trimble (Jenks) Pilling. Educated in the public schools of Philadelphia and graduate of the Central High School.

From 1872 to 1890, was with the Crane Iron Co., in various capacities, finally becoming Treasurer of the company. Resigned this position and in period 1890-



92, was connected with William R. Hart & Co. In 1892, organized the firm of Pilling & Crane, which has continued to the present time. This firm organized the Northern Iron Co. in 1902, with Mr. Pilling as Treasurer. At present, senior partner, Pilling & Crane; Treasurer and Director, Northern Iron Co.; Director,

Warwick Iron & Steel Co.; The Eastern Steel Co.; Benson Mines Co., and Real Estate Title Insurance & Trust Co.

Member of American Institute of Mining Engineers. Member of Union League Club, Philadelphia. Director of Pennsylvania Bible Society and Board of Home Missions and Church Extension, Methodist Episcopal Church.

Business address: Philadelphia, Pa.

Home address: 229 W. Upsal St., Germantown, Pa.

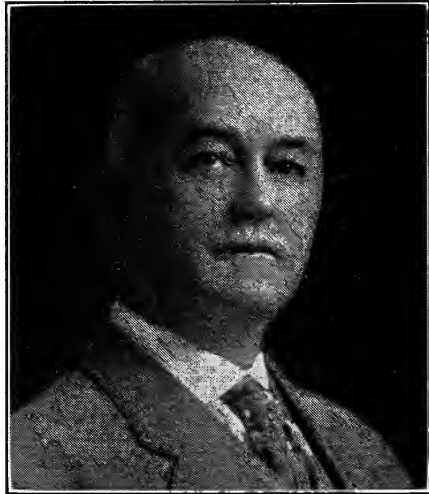
CHARLES SIVERMAN PRICE

PRESIDENT,

CAMBRIA STEEL COMPANY

BORN at West Chester, Pa., August 27, 1852, son of Philip M. and Matilda (Greentree) Price. Educated in private schools and graduate Cornell University, Bachelor of Civil Engineering, 1872.

After graduation from college, was first employed by the Detroit Bridge & Iron Works, Detroit, Mich., as draftsman. Shortly after, was elected city engineer of Lock Haven, Pa., serving for three years. In June, 1876, entered the service of the Cambria Iron Co., as draftsman in the engineering department, supervised the construction of the first open-hearth plant of the company and after completion, became turn foreman, 1878-81. Was promoted successively to the positions of Superintendent of the open-hearth works, 1881-84; Supt. of the Bessemer, open-hearth and blooming departments, 1884-86; Supt. of Metallurgical Department, 1886-90; General Supt. of Manufacture, 1890-92. Subsequently became General Manager, Vice-President and, March 15, 1910, was elected President of the Cambria Steel Co.



Member of Chi Phi Fraternity. Member of Duquesne Club, Pittsburgh; Johnstown Country Club, Johnstown. Business address: Cambria Steel Co., Johnstown, Pa. Home address: Johnstown, Pa.

CHARLES FREDERIC RAND

PRESIDENT,

THE SPANISH-AMERICAN IRON COMPANY

BORN in Canaan, Maine, August 17, 1856, son of Frank C. and Adeline M. (Smith) Rand.

From 1876 to 1886, was financial officer of a railroad corporation at Milwaukee, Wis. Was for several years, President and Treasurer of a number of iron mining companies of the Gogebic Range, including the Aurora, Colby, Tilden, Palms, Superior, Iron Belt and others Was



receiver of the Penokee & Gogebic Consolidated Mines and reorganized that company. For the last seventeen years has been engaged in the development of iron ore properties in Cuba and is now President of the Spanish-American Iron Co., the Ponupo Manganese Co., and other companies operating in Cuba.

Mr. Rand was the discoverer of the great iron ore deposits of the northeast coast of Cuba.

Director, American Institute of Mining Engineers. Member, Engineers, Down Town, Lawyers, Railroad, Jolly Mariners, Essex County Country, (Treasurer), Golf Land Co. of Essex Co. (Treasurer), Chamber of Commerce, Metropolitan Museum of Art, New England Society, Ohio Society of New York.

Business address: 71 Broadway, New York.

Home address: 347 West End Avenue, New York.

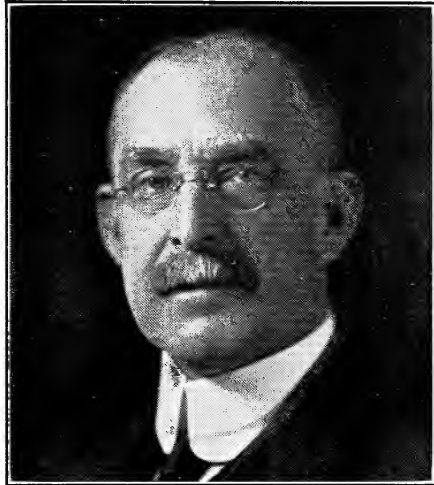
CHARLES ALBERT RATHBONE

TREASURER AND GENERAL MANAGER,
BUHL MALLEABLE COMPANY

BORN in LeRoy, Genesee Co., N. Y., August 4, 1854, son of William Palmer and H. M. (Crane) Rathbone. Educated at Patterson Academy, Detroit and Le Roy Academy, Le Roy, N. Y.

Is at present Director, Treasurer and General Manager of Buhl Malleable Co., and Director of McRae Roberts Co., Waterman Motor Co., and Wabash Portland Cement Co.

Deeply interested in building up the manufacturing portion of Detroit in the West End. Has built many homes for working men, insisting that they be not rented but sold to the men so that they might own their own homes, become taxpayers and consequently interested citizens.



Served through the Spanish war in the Navy Reserves on board U. S. Ship "Yosemite."

Member of Detroit Club, (Director); Country Club, (Director); Detroit Boat Club; Detroit Naval Reserve.

Director of Detroit Board of Commerce; member of Executive Board of Detroit Employers' Association; Past President of Malleable Iron Association of the United States.

Business address: Buhl Malleable Co., Detroit, Mich.

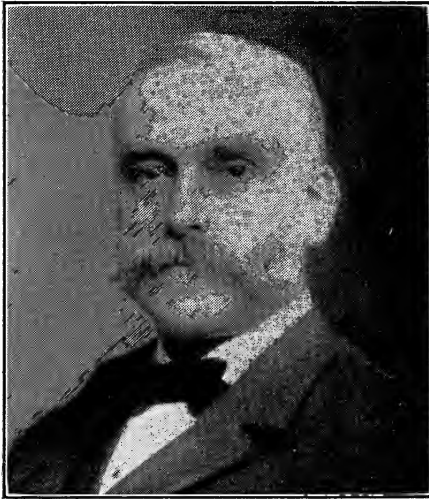
Home address: Grosse Pointe, Mich.

DAVID REEVES

PRESIDENT,
THE PHOENIX IRON COMPANY

BORN in Philadelphia, Pa., March 27, 1852, son of Samuel James and Margaret (Handy) Reeves. Educated at Rensselaer Polytechnic Institute, Troy, N. Y. Received the degree of C. E., 1872.

Entered the bridge building business in 1872 with the firm of Clarke, Reeves & Company and remained continuously with this firm during the period of twelve years, 1872-1884.



On December 19, 1878, was elected President of the Phoenix Iron Company and has continued to fill that position to the present time. On April 5, 1884, was elected President of the Phoenix Bridge Company and still continues to hold that position. Also a Director of the Cambria Iron Company.

The controlling interest in the Phoenix Works has been in the hands of the Reeves family since 1827, and the Presidents since incorporation in 1855 have been David Reeves, 1855-1871, Samuel J. Reeves, 1871-1878, and David Reeves, grandson of the founder, 1878 to date.

Member of the American Society of Civil Engineers. Member of the Engineers' Club, Philadelphia and the Philadelphia Country Club.

Business address: 410 Walnut St., Philadelphia, Pa.
Home address: Phoenixville, Pa.

JOHN REIS

VICE-PRESIDENT,

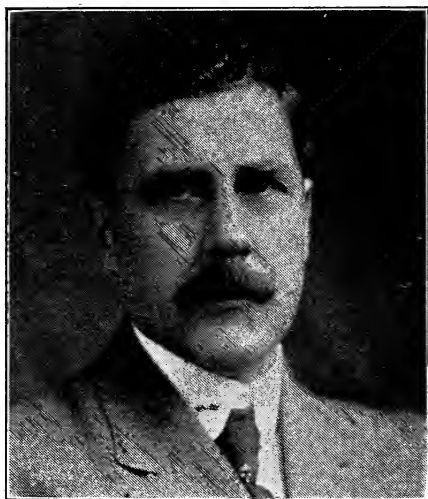
UNITED STATES STEEL CORPORATION

BORN in Niles, Ohio, April 9, 1861, son of George C. and Elizabeth (Dithridge) Reis. Educated in the public schools of New Castle, Pa.

Entered the employ of Reis Brothers, a firm established by his father, and learned the details of sheet and plate rolling. In 1886, became Vice-President and General Manager of the Gogebic Furnace Co.; in 1888, was Manager of the Nashville Iron, Steel and Charcoal Co., with furnaces at West Nashville, Tenn.; and in 1889, joined the Tennessee Coal Iron and Railroad Co., at Birmingham, Ala. In 1891, became connected with the Watts Iron and Steel Syndicate, Limited, of Middlesboro, Ky. In 1893, became connected with the Oliver Iron and Steel Co., Pittsburgh, Pa. At the formation of the National Steel Co., in 1899, was made Manager of Blast Furnaces for the company. When the National Steel Co. was absorbed by the U. S. Steel Corporation, was made General Superintendent of the Shenango Valley District. In 1905, became Assistant to President, U. S. Steel Corporation and May 1, 1911, Vice-President of the Corporation.

Business address: 71 Broadway, New York.

Home address: Montclair, N. J.



J. LEONARD REPLOGLE

ASSISTANT TO PRESIDENT,
CAMBRIA STEEL COMPANY

BORN in Bedford Co., Pa., May 6, 1876, son of Rhinehart Z. and Mary A. (Furry) Replogle. Educated in the public schools of Johnstown, Pa.

Entered the employ of the Cambria Steel Co., at age of 13, as office boy, being later promoted successively to the positions of clerk, shipper, Assistant Superintendent of Axle Dept., Superintendent of Forge, Axle and Bolt



Depts., Assistant to the Assistant General Manager, Superintendent of Order Dept., Assistant General Manager, and on March 15, 1910, was appointed to the newly created position of Assistant to President, which position he now holds. Although but thirty-five years of age, Mr. Replogle has the record of continu-

ous service in the employ of the Cambria Steel Company for twenty-two years. Director and member of Finance Committee of Johnstown Trust Co.

Director of the American Automobile Association. Member of American Electric Railway Association; Western Railway Club, Chicago; Johnstown Country Club, and Johnstown Automobile Club.

Business address: Cambria Steel Co., Johnstown, Pa.

Home address: Fayette St., "Westmont," Johnstown, Pa.

JOHN VAN WICHEREN REYNDERS

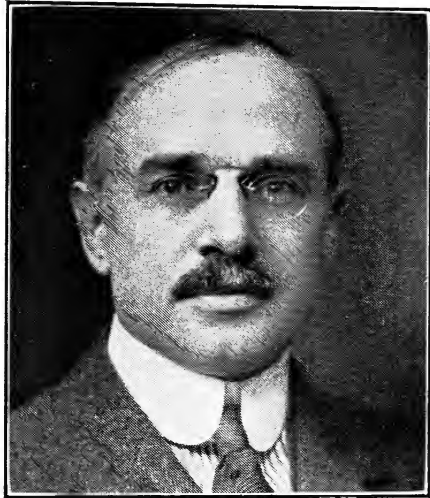
VICE-PRESIDENT,

THE PENNSYLVANIA STEEL COMPANY

BORN in Hoboken, N. J., December 17, 1866, son of John and Louise (Sellers) Reynders. Educated at Hoboken Academy, gymnasium in Germany (2 years); and graduate Rensselaer, Polytechnic Institute, Troy, N. Y. with degree of Civil Engineer.

Appointed engineer (in charge) Bridge and Construction Department of The Pennsylvania Steel Co., April 20,

1892, and became Superintendent of the same, May 15, 1896; on January 4, 1906, was made Vice-President and Director of The Pennsylvania Steel Co. Also a Director of Steelton National Bank. Delegate to Republican National Convention, 1908; President of Town Council, Steelton, Pa.; member, National Municipal League and much interested in municipal reform.



Member of American Society of Civil Engineers, Engineers' Society of Pennsylvania, (Past-President); American Society for Testing Materials. Member of University and Engineers' Clubs, New York; University Club, Philadelphia; Harrisburg Club, Harrisburg, Pa. Trustee of Harrisburg Hospital, Harrisburg, Pa.

Business address: Steelton, Pa.

Home address: Steelton, Pa.

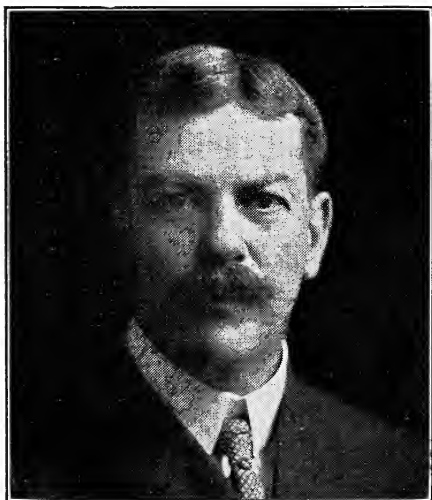
FRANKLIN BATCHELDER RICHARDS

MANAGER ORE AND PIG IRON DEPARTMENTS,

M. A. HANNA & COMPANY

BORN in North Andover, Mass., November 12, 1862, son of Albert D. and Mary F. (Preston) Richards. Educated in the public schools of Somerville, Mass., and graduate Mass. Institute of Technology, S. B., 1884.

In 1885, Assistant Chemist, Joliet Steel Works; 1886, Chemist, Brier Hill Iron & Coal Co.; 1887, Superintendent, Himrod Furnaces, Youngstown, Ohio, for same company; 1888, in charge of ore sales for Tod, Stambaugh & Co., Cleveland, Ohio; 1889, for a short time Superintendent, Brier Hill Iron & Coal Co.; 1890-1893, General Manager, Buena Vista Iron Co., Virginia; since 1893, with M. A. Hanna & Co., first in ore sales department, then General Manager of Blast Fur-



naces and now Manager of Ore and Pig Iron Departments. Also Officer and Director in several companies closely related to the last named company.

Member of American Institute of Mining Engineers. Member of Union, Tavern, Hermit, Country, Mayfield, Euclid and Roadside Clubs, Cleveland; Engineers Club, New York; Duquesne Club, Pittsburgh; Buffalo Club, Buffalo, N. Y.; Detroit Club, Detroit, Mich.

Business address: Cleveland, O.

Home address: Euclid Heights, Cleveland, O.

C. SNELLING ROBINSON

SECOND VICE-PRESIDENT,

THE YOUNGSTOWN SHEET AND TUBE COMPANY

BORN in Boston, Mass., March 1, 1864, son of Theodore and Susannah Snelling (Powell) Robinson. Graduate of Massachusetts Institute of Technology, S. B., 1884.

After graduation became Assistant Chemist for the Joliet Steel Co., 1885-1887; and in 1887, was Chemist for Mather, Morse & Co., at Colby Mine, Bessemer, Mich.; 1887-1889, Mining Engineer and Assayer, Duluth, Minn.; 1889-1892,

Chief Chemist, Illinois Steel Co., Joliet, Ill.; 1892, Manager of Blast Furnaces, Dunbar Furnace Co., Dunbar, Pa.; 1892-1899, Blast Furnace Superintendent, Asst. General Superintendent and General Superintendent, Minnequa Works, Colorado Fuel & Iron Co., Pueblo, Col.; 1899-1906,



Gen. Mngr. Iron Dept., Colo. Fuel & Iron Co. Since 1906, with the Youngstown Sheet & Tube Co. Member, National Advisory Board on Fuels and Structural Materials.

Member, American Institute of Mining Engineers, American Society of Mechanical Engineers, American Society for Testing Materials and The Iron and Steel Institute (Great Britain). Member of Duquesne Club, Pittsburgh; Youngstown Club and Mahoning Golf Club.

Business address: Youngstown, O.

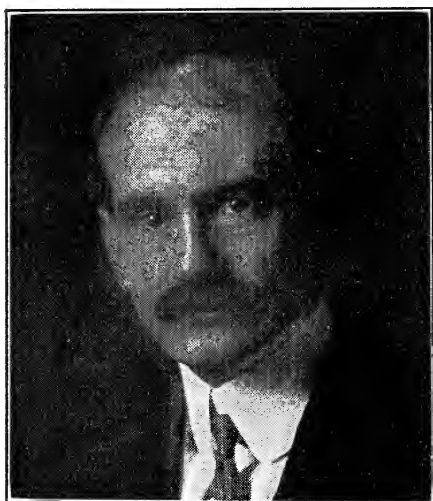
Home address: 429 Wick Ave., Youngstown, O.

THEODORE WINTHROP ROBINSON

FIRST VICE-PRESIDENT,
ILLINOIS STEEL COMPANY

BORN in Boston, Mass., June 7, 1862, son of Theodore and Susannah Snelling (Powell) Robinson. Graduate of Massachusetts Institute of Technology, S. B., 1884.

During the period 1885-1889, was Chemist for the Joliet Steel Co.; 1889-92, Manager of Blast Furnaces at the Milwaukee plant, Illinois Steel Co.; 1892-1899, General Superintendent of Colorado Fuel and Iron Co.,



Pueblo, Colorado; in 1899, returned to the Illinois Steel Co., of which he is now the First Vice-President. Also Director of Central Trust Co., of Illinois, South Chicago Savings Bank and Chicago Telephone Co. of Chicago.

Member of the Iron and Steel Institute (Great Britain), and the American Institute of Mining Engineers. Member of the Chicago, Union League, Commercial, Mid-Day, University and Glen View Clubs of Chicago, Ill. Term member of the Corporation, Massachusetts Institute of Technology; member of Board of Education of City of Chicago, 1907-11; member of Board of Managers and Chairman of Illinois State Committee of the National Society for the Promotion of Industrial Education.

Business address: Chicago, Ill.

Home address: 1620 Ridge Avenue, Evanston, Ill.

CHARLES GUSTAVUS ROEBLING

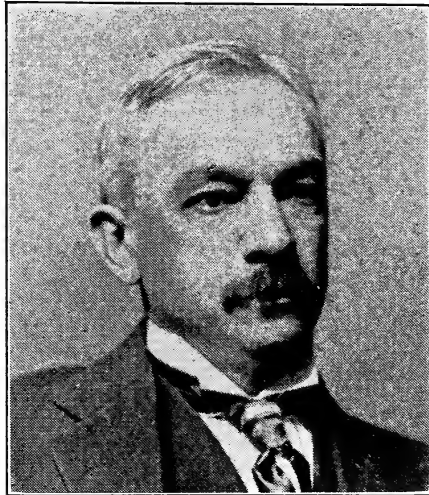
PRESIDENT,

JOHN A. ROEBLING'S SONS COMPANY

BORN in Trenton, New Jersey, December 9, 1849, son of John A. and Johanna (Herting) Roebling. Graduate of Rensselaer Polytechnic Institute, C. E., 1871.

Mechanical engineer for John A. Roebling's Sons Co., of Trenton and Roebling, N. J.; engineer and builder of Oil City Suspension Bridge, Oil City, Pa.; engineer and contractor of machinery for removal of Cleopatra

Needle from Alexandria, Egypt, to New York, 1881; contractor and builder of cables, Williamsburg Suspension Bridge, N. Y., 1902. President of John A. Roebling's Sons Co., Roebling Construction Co., Porter Screen Mfg. Co., New Jersey Wire Cloth Co.; Director of Mercer Automobile Co.; Vice-Presi-



dent of John A. Roebling's Sons Co., of New York.

Member of Legislature of New Jersey, 1893; Presidential Elector for New Jersey, 1904; Commissioner of Water Works, Trenton, N. J.; Commissioner of Water Works, Atlantic City, N. J.

Member of Iron and Steel Institute of Great Britain; American Institute of Mining Engineers. Member of Engineers' Club, New York, and Lotus Club, Trenton.

Business address: Trenton, New Jersey.

Home address: Trenton, New Jersey.

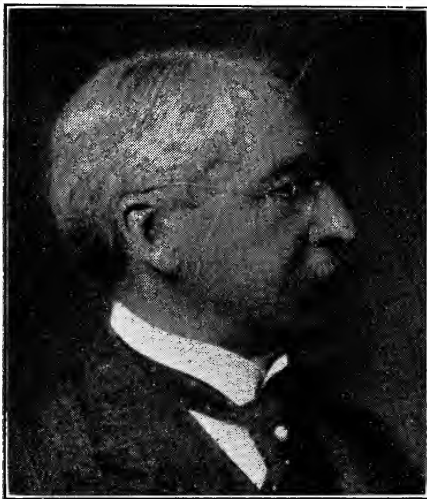
FERDINAND W. ROEBLING

SECRETARY AND TREASURER,

JOHN A. ROEBLING'S SONS COMPANY

BORN in Saxonburgh, Butler County, Pa., February 27, 1842, son of John A. and Johanna (Herting) Roebbling. Educated at the Polytechnic College, Philadelphia, Pa.

An active Director in twenty-nine manufacturing and financial corporations. Secretary and Treasurer, John A. Roebbling's Sons Co.; Secretary, John A. Roebbling's Sons Co., of New York; President, Trenton Brass



& Machine Co.; Union Mills Paper Mfg. Co., Frick & Lindsay Co.; Mercer Automobile Co.; and Tabulating Machine Co. Vice-President, Standard Fire Ins. Co. Treasurer, New Jersey Wire Cloth Co. Director, Otis Elevator Co., A. Leschen & Sons Rope Co., Trenton Flint and Spar Company, Trenton Potteries Co.,

United Power & Transportation Co., Empire State Power Co., Interstate Railways Co., Trenton, Hamilton & Ewing R. R. Co., Rochester, Syracuse & Eastern R. R. Co., Public Service Corporation of N. J., and a number of street railway companies and banks.

Member of Union League Club, Engineers' Club, New York and many other social clubs and societies. Trustee of the Public Library, Trenton, N. J.

Business address: Trenton, N. J.

Home address: Trenton, N. J.

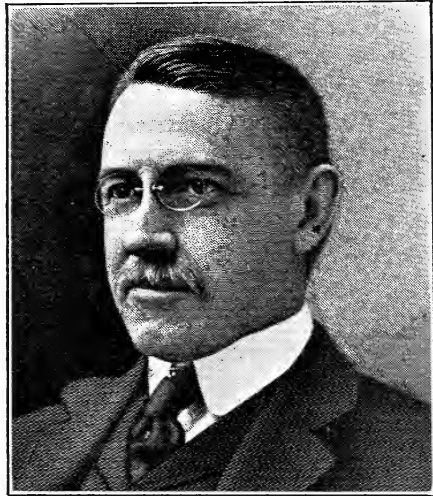
WALLACE HURTTE ROWE

PRESIDENT,
PITTSBURGH STEEL COMPANY

BORN in St. Louis, Mo., February 15, 1861, son of Judge Joseph and Margaret (Boyce) Rowe. Educated in private schools and colleges of Missouri.

Started in the wire business in St. Louis in 1883. In 1886, with former associates, organized the Braddock Wire Co., Pittsburgh, Pa. and became Treasurer and General Manager. Built and organized the company's plant at Rankin, Pa. This

company was merged in December, 1892, in the Consolidated Steel and Wire Co., Chicago, and Mr. Rowe was placed in charge of all its Pennsylvania interests. Took an active part in the organization of the American Steel & Wire Co., which absorbed the Consolidated and continued with the



American Steel & Wire Co. for a year after its absorption by the U. S. Steel Corpn. Resigned in order to establish the Pittsburgh Steel Co., of which he was elected President. Also President of Pittsburgh Steel Products Co.; Vice-President, Pittsburgh Ice Co.; Director, Duquesne National Bank.

Member of Duquesne, University, Union Clubs, and Pittsburgh Athletic Association, Pittsburgh, etc., etc.

Business address: Pittsburgh, Pa.

Home address: Pittsburgh, Pa.

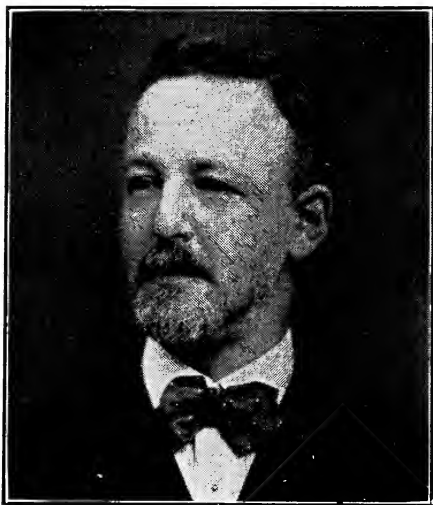
JOHN LOUIS AUGUST RUHL

ASSISTANT SECRETARY,

THE ROESSLER & HASSLACHER CHEMICAL COMPANY

BORN in New York City, January 22, 1862, son of William and Emma (Stegmann) Ruhl. Educated in private school in New York and finished education in Germany (3 years). Took Chemical Course at Cooper's Union Night School.

On his return from Europe in September, 1879, started in the chemical business and for five years



was situated in Boston. In 1889, joined The Roessler and Hasslacher Chemical Company and from 1893 to 1900, traveled on the Pacific coast and in Mexico selling cyanide and other mining supplies to cyanide and chlorination plants. In 1900, became Assistant Secretary and Office Manager of the Ferro Alloy Department

which position he now holds. Director, Perth Amboy Chemical Works.

Member of The Iron and Steel Institute, Great Britain; American Institute of Mining Engineers, Society of Chemical Industry, Electro-chemical Society, and American Chemical Society. Member of New York Athletic Club, Pittsburgh Athletic Association, Chemists' Club and German Liederkranz.

Business address: 100 William Street, New York.

Home address: 817 West End Avenue, New York.

WALTER CLARK RUNYON

PRESIDENT,

THE STRUTHERS FURNACE COMPANY

BORN in Chicago, Illinois, April 9, 1857, son of Clark and Laura (Wheelock) Runyon. Educated in public and private schools of Chicago, Illinois.

Started in business in 1871, with the Union Rolling Mill Co., in Chicago and became Secretary of the company in 1879. Resigned in 1881, to join J. B. Stubbs, with firm name of Stubbs & Runyon, in iron and steel commission business. In 1886, removed to Cleveland, O., and organized the firm of Runyon, Stubbs and Mack, iron ore commission dealers. In 1894, engaged in the blast furnace business and in 1896, purchased the Struthers Furnace Co. In 1905, organized the Struthers Coal & Coke Co., and is now President of both



companies. Also senior partner in the firm of Runyon, Fairbank & Co. One of the organizers and the first Secretary of the Lake Superior Iron Ore Association. Organizer of the Bessemer Pig Iron Association.

Member of the American Institute of Mining Engineers. Member of Lotos Club, New York; Automobile Club of America, Ohio Society of New York, Empire State Society, Sons of the American Revolution.

Business address: 1106 Citizens Bldg., Cleveland, O.

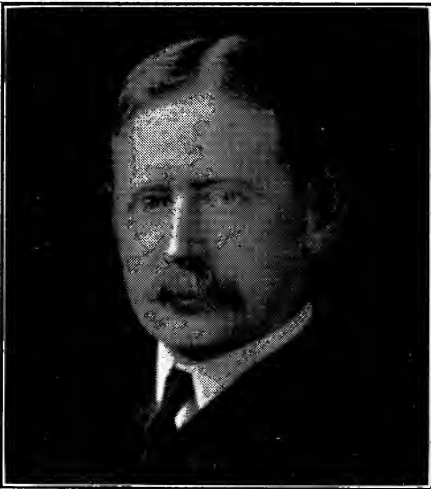
Home address: Hotel Marie Antoinette, New York.

JOHN ROSS RUSSEL

VICE-PRESIDENT AND TREASURER,
GREAT LAKES ENGINEERING WORKS

BORN in Detroit, Mich., July 11, 1857, son of George Black and Anne (Davenport) Russel. Educated in and graduated from the public schools of Detroit, Mich., and graduate of the University of Michigan with degrees of B. A., 1879, and M. D., 1882.

In 1882, engaged in the foundry business with the Russel Wheel and Foundry Company; was elected Sec-



retary of the company in 1885, and elected to the dual position of Secretary and Treasurer of the company in 1890. In 1902, in connection with Detroit, Chicago, Cleveland, Buffalo, and New York parties, organized the Great Lakes Engineering Works with principal offices at Detroit, Michigan and was made Secretary and

Treasurer of the company at its organization. In 1909, was elected Vice-President of the company but still retains his post of Treasurer.

Member of the Detroit Club, University Club of Detroit, Detroit Boat Club, Detroit Country Club, Union Club of Cleveland, Ohio, and Huron Mountain Club of Northern Michigan. Delta Kappa Epsilon Fraternity.

Business address: Foot of Rivard St., Detroit, Mich.

Home address: 673 Jefferson Ave., Detroit, Mich.

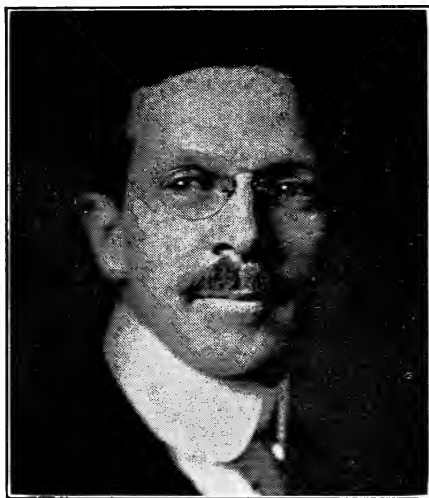
WILLIAM DURHAM SARGENT

PRESIDENT,
READING STEEL CASTING COMPANY

BORN in Lynn, Mass., June 16, 1863, son of George M. and Helen M. (Durham) Sargent. Graduate of Northwestern University, A. M., 1884, and Massachusetts Institute of Technology, M. E., 1887.

Served apprenticeship in the machine department of the Pullman Co., Pullman, Ill., and also at the Ramapo Iron Works, Hilburn, N. Y. In 1888, became Super-

intendent of the Congdon Brake Shoe and Foundry Co., Chicago; in 1892, Vice-President of the Sargent Co.; in 1898, President of the Sargent Co.; in 1901, President of the American Brake Shoe & Foundry Co. In 1905, Vice-President, American Steel Foundries; in 1906, President, Reading Steel Castings Co.; in 1910, President of the Bayonne Steel Casting Co.; in 1911, Chairman, Board of Directors, Saurer Motor Co.



Member, American Institute of Mining Engineers, American Society of Mechanical Engineers; member of Railroad, Engineers and Technology Clubs of New York; University Club, Chicago. Secretary, Essex County Country Club, West Orange, N. J. Phi Kappa Sigma Fraternity.

Business address: 30 Church Street, New York.

Home address: Hutton Park, West Orange, N. J.

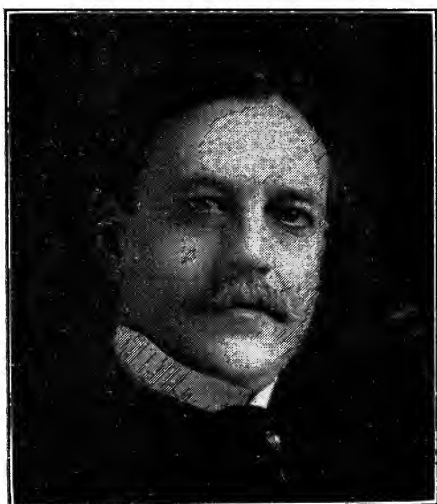
WILLIAM BACON SCHILLER

PRESIDENT,

NATIONAL TUBE COMPANY

BORN in Pittsburgh, Pa., July 7, 1859, son of John G. and Ann J. (Queen) Schiller. Educated in the public schools of Youngstown, Ohio.

Began work in 1876, as office boy for R. W. Hitchcock & Co., Youngstown; Jan. 1, 1880, clerk, Second National Bank, Youngstown; Jan. 1, 1883, bookkeeper, Brier Hill Iron & Coal Co., and in March of same year,



made Secretary of the company. In 1886, was made Treasurer and General Manager of the Youngstown Coke Co., and the Bessemer Limestone Co., Limited. Came to Pittsburgh, Pa., Aug. 1, 1889, as General Manager of the Monongahela Furnace Co. From 1892, held the position of Manager of Blast Fur-

naces and Steel Works. July 1, 1899, the date of organization of the National Tube Co., became Manager of all the works at McKeesport. In April, 1900, made Director and Asst. First Vice-Pres.; in March, 1901, became First Vice-President; and in August, 1902, President.

Member of Duquesne, Pittsburgh, Union and Pittsburgh Golf Clubs, Pittsburgh; and Allegheny Country Club, Sewickley, Pa. Director, Kingsley House Assn.

Business address: Frick Building, Pittsburgh, Pa.

Home address: 5075 Forbes Street, Pittsburgh, Pa.

ISAAC MACBURNEY SCOTT

PRESIDENT,

LA BELLE IRON WORKS

BORN in Tuscarawas County, Ohio, February 19, 1866, son of William Briar and Mary (Boyd) Scott. Educated in the public schools of Morristown, Ohio.

Began in 1883 in the shipping department of the Aetna Iron and Nail Company, Bridgeport, O., and continued with this company and its successor, the Aetna-Standard Iron & Steel Company, until 1893, serving successively as paymaster,

invoice clerk, bookkeeper and Assistant Secretary.

In 1893, was elected Secretary and Treasurer of the Beaver Tin Plate Company, Lisbon. In 1898, returned to the Aetna-Standard Iron & Steel Company as Secretary and continued as such until 1899, when the Company was acquired by

the American Sheet Steel Company. From 1899 to 1903, was Auditor of the American Sheet Steel Company. In September, 1903, was elected Treasurer of the La Belle Iron Works and in June, 1904, President. Also Vice-President, Scott Lumber Company, Bridgeport, Ohio.

Member of Duquesne Club, Pittsburgh; Steubenville Country Club; and Ohio Society of New York.

Member of Duquesne Club, Pittsburgh; Steubenville Country Club; and Ohio Society of New York.



Business address: Steubenville, Ohio.

Home address: 514 North Fifth St., Steubenville, O.

JASPER HOLMES SHEADLE

SECRETARY,

THE CLEVELAND-CLIFFS IRON COMPANY.

BORN in New Bedford, Pa., son of Obediah and Sarah (Barnheisel) Sheadle. Educated in public schools, and at Hiram College.

First joined his father in banking business at Girard, Ohio, and was for two years teller of Girard Savings Bank. At age of 22, became Assistant Cashier of the Second National Bank of Youngstown. Left the bank-



ing business and went to New York City as Superintendent of Laying of Gas Mains for the Standard Gas Light Co. In 1888, became Secretary of the Mahoning Valley Iron Manufacturers' Association. In 1890, became Secretary of Cleveland-Cliffs Iron Co., in charge of ore sales and lake transportation. Also Vice-

President, Cleveland Iron Mining Co., Jackson Iron Co., Excelsior Iron Co.; Secretary of Grand Island Steamship Co., Hopkins Steamship Co.; Director of Presque Isle Transportation Co., Hanna Transit Co., Miller Transit Co., Cleveland Trust Co. Vice-President, Lake Carriers' Assn. and Director Great Lakes Protective Assn.

Member of the Union, Rowfant, Mayfield Country, and Euclid (Past President) Clubs of Cleveland, Ohio.

Business address: Rockefeller Building, Cleveland, O.

Home address: Norfolk Road, Cleveland, O.

SAMUEL BERTRAM SHELDON

CONSULTING ENGINEER

BORN in Manchester, Mass., August 31, 1868, son of Charles H. and Mary A. C. (Smith) Sheldon. Educated at Massachusetts Institute of Technology, Class of 1889, taking the special course in chemistry.

From January, 1889 to October, 1890, Assistant Chemist, Milwaukee Works, Illinois Steel Co.; October, 1890 to May, 1892, Chief Chemist, Otis Steel Co., Ltd., Cleveland, and May, 1892, to November, 1899, Superintendent of Bessemer and Open Hearth Departments; November, 1899 to May, 1901, Asst. General Superintendent, Joliet Works, Illinois Steel Co., and General Superintendent of same, May, 1901 to November, 1903; November, 1903 to February, 1909, General Superintendent, Lackawanna Steel Co.; February, 1909 to December, 1909, General Superintendent, Saucon Works, Bethlehem Steel Co. Since December, 1909, Consulting Engineer.



Member, American Society of Mechanical Engineers.
Fraternally, a Mason.

Business address: 117 Church Street, Bethlehem, Pa.

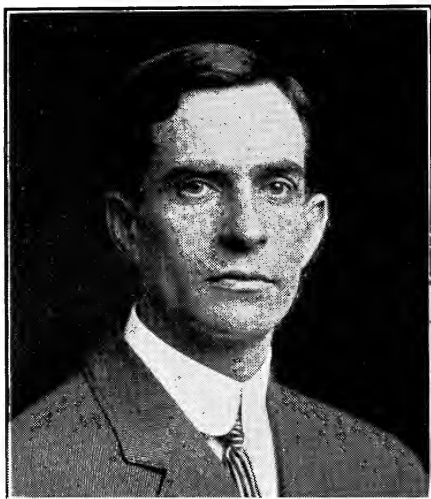
Home address: 117 Church Street, Bethlehem, Pa.

LOUIS ALFRED SHEPARD

NEW YORK MANAGER,
TIOGA STEEL AND IRON COMPANY

BORN in Spencer, Tioga County, N. Y., November 24, 1870, son of Silvenes and Mariette (Schofield) Shepard. Educated at Rochester University and graduate Cornell University, A. B., 1892.

In 1898-99, was mechanical engineer for the P. & R. Ry.; from 1899 to 1904, chief engineer for designing and construction of steel freight cars, with Cornelius Vanderbilt; 1904-1906, Secretary, Manager of Sales and Director of Benjamin Atha & Co., and 1906-1910, held the same positions in the Atha Steel Casting Co., its successor. The latter company, was succeeded by the Titan Steel Casting Co., in 1910, and Mr. Shepard became Vice-President, General Manager and Director.



Member of American Society of Mechanical Engineers, American Electric Railway Association, American Railway Master Mechanics' Association, American Society of Automobile Engineers. Member of Engineers', Railroad, Machinery and Cornell University Clubs of New York. Member St. Anthony Club. Member N. Y. Railroad Club, New England Railroad Club, Central Railroad Club. Delta Psi Fraternity.

Business address: Room 517, 30 Church St., N. Y.

Home address: 23 Glenwood Ave., East Orange, N. J.

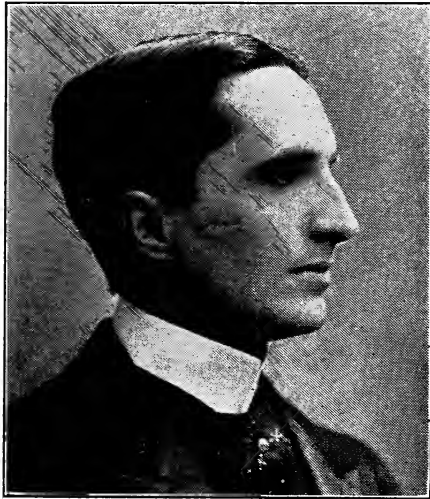
RICHARD BRINSLEY SHERIDAN

GENERAL MANAGER,

THE BROWN HOISTING MACHINERY COMPANY

BORN in London, England, September 10, 1872, son of Henry Brinsley and Clara (Kimball) Sheridan. Educated in the public schools of Cleveland, Ohio; the University School, Cleveland; Yale University; and Massachusetts Institute of Technology. Received the degree S.B., 1895, from Mass. Institute of Technology.

After graduating from college in 1895, entered the United States Navy in the Construction and Repair Department and remained in the service until the fall of 1896, when he became associated with The Brown Hoisting Machinery Company of Cleveland, Ohio. Has continued in the employ of this company ever since serving the company in the capacity



of mechanical engineer. Promoted through various grades to the position of General Manager of the Company which position he now holds.

Member of American Society of Mechanical Engineers and Society of Naval Architects and Marine Engineers. Member of Union Club, Tavern Club, Hunt Club, and Mayfield Country Club, Cleveland; Sigma Chi Fraternity.

Business address: Cleveland, Ohio.

Home address: Cleveland, Ohio.

WILLIAM PAUL SIEBERT

ASSISTANT GENERAL MANAGER OF SALES,
CARNEGIE STEEL COMPANY

BORN in Pittsburgh, Pa., June 9, 1859, son of William and Mary Z. (Zimmerman) Siebert. Educated in the public schools of Pittsburgh, Pa.

Began his business career with the McConway and Torley Company, Pittsburgh, acting as chief clerk from 1880 to 1889. Became salesman for Park Brothers and Company, Pittsburgh, and had his headquarters at



Denver, Colorado, during the period 1892 to 1895. In 1895, became General Manager of Sales for the Ohio Steel Company, Youngstown, Ohio, and continued in the same capacity with the National Steel Company, which acquired the Ohio Steel Company in 1899. At the formation of the United States Steel Corporation,

the National Steel Company was merged with the Carnegie Steel Company, and Mr. Siebert became Assistant General Manager of Sales for the latter company.

Member of Duquesne Club, Union Club and Pittsburgh Athletic Association, Pittsburgh.

Business address: 313 Carnegie Bldg., Pittsburgh, Pa.

Home address: Sewickley, Pa.

FRANCIS CHARLES SMINK

PRESIDENT,
READING IRON COMPANY

BORN in Kutztown, Berks County, Pa., September 8, 1845, son of H. B. and Elizabeth (Ebert) Smink. Educated in Reading High School, Reading, Pa.

Began as bookkeeper in a shoe manufacturing establishment. In 1864, was Secretary to the Superintendent of the Philadelphia and Reading Company and later resigned to accept a position in Bushong Brothers Bank of which he became cashier

and acted as such until 1877. Mr. Smink then entered the service of the Reading Iron Works as Business Manager and continued in that capacity until 1889, when the company was reorganized as the Reading Iron Co., with Mr. Smink as Vice-President and General Manager. He succeeded



Mr. G. F. Baer as President in 1902. Also member of the Executive Committee and Director of the Pennsylvania Steel Company and Director of its numerous subsidiary companies. Director of Temple Iron Co., Pure Oil Co., Reading Trust Co., and other companies.

Member of Franklin Institute, Philadelphia and American Institute of Mining Engineers. Member of Manhattan and Railroad Clubs, New York.

Business address: Reading, Pa.

Home address: 217 North 5th Street, Reading, Pa.

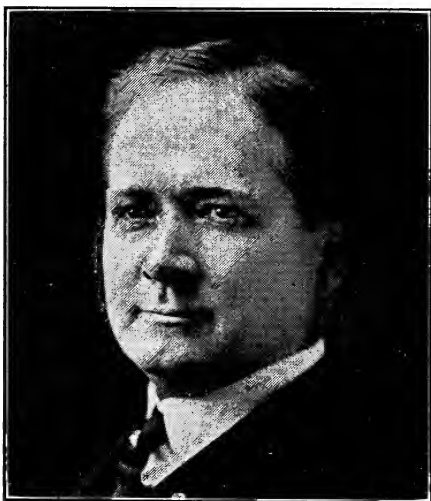
CAMERON C. SMITH

PRESIDENT,

UNION STEEL CASTING COMPANY

BORN in Butler Co., Pa., April 24, 1861, son of Joseph S. and Mary A. (Watson) Smith. Educated at Waynesburg College, A. B., 1882.

In 1883, became clerk for Wilson, Walker & Co., later merged in Carnegie, Phipps & Co., and Carnegie Steel Co. After 1885, filled various positions in the Order Department. In 1893, left the Carnegie Steel



Co., to become bookkeeper and salesman for the Reliance Steel Casting Co. In 1899, left the latter company and organized and built the works of the Union Steel Casting Co. Was first elected Secretary and General Manager and shortly afterward, President, which position he now holds.

Member of American Society of Civil Engineers, American Society of Mechanical Engineers, American Society for Testing Materials; Engineers' Society of Western Pennsylvania; Director of the Pittsburgh Y. M. C. A. Member of Sons of American Revolution and a Mason. Member of Duquesne Club, Pittsburgh.

Business address: Union Steel Casting Co., Pittsburgh, Pa.

Home address: 719 North Negley Avenue, Pittsburgh, Pa.

CHARLES J. SNOW

TREASURER AND DIRECTOR,

THE BRUCE-MACBETH ENGINE COMPANY

BORN in Albany, N. Y., April 20, 1867, son of Joseph H. and Anna E. (Smith) Snow. Educated in the public schools of Cleveland, Ohio.

For several years, was connected with the American Shipbuilding Co. which united all the shipbuilding plants on the Great Lakes in 1899. Resigned his position with this company in order to engage in business for himself and became one

of the organizers and incorporators of the Macbeth Iron Company at its formation in 1901. The name of this company was subsequently changed to that of The Bruce-Macbeth Engine Company. Mr. Snow was elected Treasurer and Director of the company at the time of its formation and still con-



tinues to serve the company in that capacity. Beside being Treasurer and Director of the Bruce-Macbeth Engine Company, Mr. Snow is also a Director of The Pando Coal Company.

Member of the Cleveland Athletic Club. For many years actively indentified with the National Metal Trades Association in its branch at Cleveland.

Business address: 2111 Center St., Cleveland, O.

Home address: 1494 Clarence Ave., Lakewood, O.

HENRY STEINMAN SNYDER

SECOND VICE-PRESIDENT,
BETHLEHEM STEEL COMPANY

BORN in Bethlehem, Pa., May 21, 1869, son of Mifflin H. and Angeline (Steinman) Snyder. Educated in the public schools of Bethlehem, Pa.

Became Assistant to the President, Bethlehem Iron Co., May 29, 1895; Secretary and Treasurer, Bethlehem Steel Co., August 27, 1901; Secretary and Treasurer, Bethlehem Steel Corporation, January 19, 1905, Vice-



President, Bethlehem Steel Co., July 17, 1906; was elected President of Juragua Iron Co., January 2, 1909, and President of the Bethlehem Iron Mines Co., April 21, 1909, and President of the Cheever Iron Ore Co., September 14, 1909. Also 2nd Vice-President, Bethlehem Steel Company. Director, Bethlehem Steel Corpora-

tion, Bethlehem Steel Company, Union Iron Works, Harlan and Hollingsworth Corporation, Samuel L. Moore & Sons Corporation, Philadelphia, Bethlehem & New England R. R. Co. and Minsi Trail Bridge Co.

Member of Engineers' Club, Railroad Club, and Pennsylvania Society of New York; American Club, Havana; Bethlehem Club, Bethlehem; and Country Club of Northampton County.

Business address: South Bethlehem, Pa.

Home address: 150 Church St., Bethlehem, Pa.

JOHN STAMBAUGH

SECRETARY AND TREASURER,
YOUNGSTOWN STEEL COMPANY

BORN in Girard, Ohio, February 15, 1862, son of John and Caroline (Hamilton) Stambaugh. Graduate of Cornell University, Ph. B., 1884.

From 1885 to 1887, was chemist for the Youngstown Steel Company; 1887 to 1900, with the William Tod Company, being promoted to the position of Manager; since 1900, Secretary and Treasurer of the Youngstown

Steel Company. Also at present, President, The William Tod Company, and The Youngstown & Southern Ry. Company; Vice-President, The Tod Stambaugh Company; Secretary and Treasurer, The Graceton Coke Company; Director, The Biwabik Mining Company, The First National Bank, Youngstown, and the Dollar Savings and Trust Company, Youngstown.



Member of the Youngstown Club, Youngstown; Union Club, Cleveland; and Duquesne Club, Pittsburgh. Trustee of the Youngstown City Hospital.

Business address: 513 Stambaugh Building, Youngstown, O.

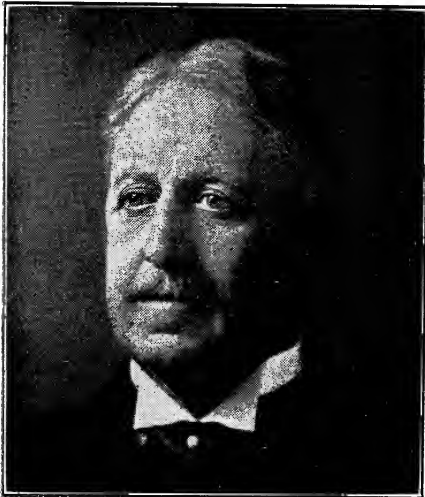
Home address: 621 Wick Ave., Youngstown, O.

FRANCIS LYNDE STETSON

GENERAL COUNSEL,
UNITED STATES STEEL CORPORATION

BORN in Keeseville, Clinton County, N. Y., April 23, 1846, son of Lemuel and Helen (Hascall) Stetson. Educated in Plattsburgh Academy, Williams College A. B., 1867, A. M.; Columbia University Law School, L.L.B.; and L.L.D. (St. Johns College, Maryland.)

Engaged in practice of law in New York City from 1869; now senior member of law firm of Stetson, Jennings and Russell. General counsel for United States Steel Corporation since its formation in 1901, U. S. Rubber Co. since 1901, Northern Pacific Railway since 1896, Erie Railroad since 1895, and Southern Railway since 1894. Director of U. S. Express Co., and Niagara Falls Power Co.



Member of the Century University, Grolier, Metropolitan, Riding, Democratic, National Arts Clubs, New York. President, Alpha Delta Phi Club; President, Alpha Delta Phi Fraternity, 1908-10; Phi Beta Kappa Fraternity; President, Church Club, New York, 1909-10; President, New York State Bar Association, 1908; President, Bar Association of City of New York, 1910-11.

Business address: 15 Broad Street, New York.

Home address: 4 East 74th Street, New York.

ARCHIBALD ALSTON STEVENSON

VICE-PRESIDENT,

STANDARD STEEL WORKS COMPANY

BORN in Allegheny City, Pa., April 10, 1862, son of Joseph P. and Margaret J. (Alston) Stevenson. Graduate of high school, Rock Island, Ill., 1878 and attended University of Illinois two years.

Entered the employ of the Southwark Foundry & Machine Co., in July, 1881, and remained four years and a half, the last year as foreman of the drawing room.

From 1886 to 1888, with the Cambria Iron Co., at first in the Chief Engineer's office and later as foreman of the Forge and Axle Plant. Entered the employ of the Standard Steel Works Co., in 1888, as engineer and filled various positions until January 1, 1903, when he was made Superintendent. In July, 1908, was elected



Vice-President of the Standard Steel Works Company.

President of Association of American Steel Manufacturers. Member, American Society of Mechanical Engineers, American Institute of Mining Engineers, American Society for Testing Materials, International Association for Testing Materials, Franklin Institute of Philadelphia and Western Railway Club, Chicago; Union League, Art and City Clubs, Philadelphia.

Business address: Morris Building, Philadelphia, Pa.

Home address: 121 Edgewood Road, Ardmore, Pa.

JAMES SYDNEY STILLMAN

SECRETARY AND TREASURER,
EMPIRE STEEL AND IRON COMPANY

BORN in Tuscaloosa, Ala., June 18, 1877, son of Charles A. and Elfreda (Walker) Stillman. Graduate of the University of Alabama, Tuscaloosa, Alabama, with the degree of A. B., in 1896.

After graduation, entered the employ of the Corona Coal and Coke Co., and remained with the company two years, 1896-1898. Later was connected with the South-



ern Coal Company and in 1899, removed to Birmingham, Alabama, being there engaged in business with a firm of Insurance Brokers for several months. In the same year became connected with the Empire Steel and Iron Company and has remained continuously in the employ of the company since that time, being promoted

through various grades to the office of Secretary and Treasurer of the company, which position he now holds. Mr. Stillman is also Secretary and Director of the Crane Iron Works, the Mount Hope Mineral Railroad Company, Victoria Coal and Coke Company, Sewell Colliery Company and the Crane Railroad Company.

Business address: Catasauqua, Pa.

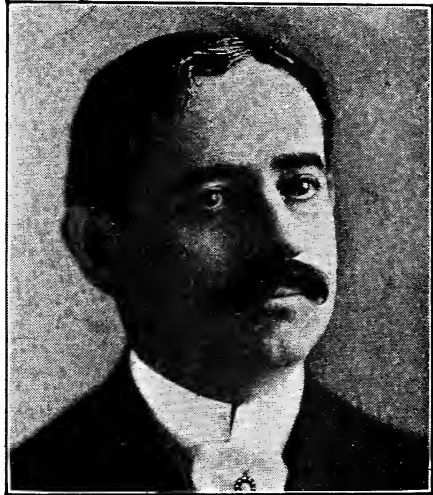
Home address: Catasauqua, Pa.

JOHN McPHERSON TAYLOR

PRESIDENT AND GENERAL MANAGER,
TAYLOR-FORBES COMPANY

BORN in Belfast, Ireland, May 24, 1866, son of William and Mary (McPherson) Taylor. Educated in public schools of Belfast, Ireland and Toronto, Canada.

Served apprenticeship at James Morrison's Brass Works, Toronto, and at age of 22, became Manager of the Sales Department. In 1888, organized the Dominion Radiator Co., and became Secretary and General Manager. In 1892, was appointed Director, Secretary, Treasurer and General Manager. In 1902, organized the Taylor-Forbes Co., of which he has been since organization, President and General Manager. Also President, Guelph Oil & Gas Co.; Vice-President, Standard Fittings Co.; and Director, Empire Traction Co.



Member National Founders' Association; American Foundrymen's Association; Canadian Manufacturers' Association, (member of Council). Director, Guelph General Hospital; member, Executive Board, St. John's Ambulance Association of Canada. Member, Masonic Fraternity, Knights of Pythias, Knights of Macabees. Member, National and Engineers' Clubs, Toronto; Travelers' Club, Winnipeg; and Priory Club, Guelph.

Business address: Guelph, Ontario.

Home address: Guelph, Ontario.

W. HETHERINGTON TAYLOR

PRESIDENT AND TREASURER,
DAVID WILLIAMS COMPANY

BORN in Buffalo, N. Y., January 31, 1860, son of William and Elizabeth (Hetherington) Taylor. Educated in the public schools and at a Business College.

From 1893 to 1898, Vice-President of the McGraw Publishing Co., publishers of the "Street Railway Journal" and "American Electrician;" 1898-1902, President of the Trade News Publishing Co., publishers of "Hub,"



"Painting and Decorating," "Harness" and "Carriage and Harness." In 1903, organized the Taylor Publishing Co. and consolidated "The Engineer," published in Cleveland, with "Steam Engineering," published in Chicago. Was President of this company until 1907, when he came to New York and became Presi-

dent and Treasurer of the David Williams Co., publishers of "The Iron Age," "Iron Age Hardware," "Metal Worker" and "Building Age" and also proprietors and publishers of technical and trade books.

Member of Machinery Club, New York; Space Club and Chicago Athletic Association, Chicago; Commonwealth Club and Country Club, Upper Montclair; Essex County Country Club and other clubs.

Business address: 239 West 39th St., New York City

Home address: 433 Park St., Upper Montclair, N. J.

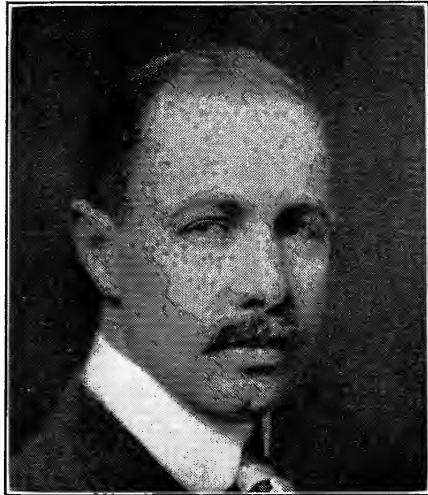
RODNEY THAYER

VICE-PRESIDENT AND GENERAL MANAGER,
BALDT STEEL COMPANY

BORN in Boston, Mass., March 27, 1873, son of Charles French and Mary J. (Eddy) Thayer. Educated at Cambridge Latin School, Cambridge, Mass.

Entered the service of the Babcock and Wilcox Co., boiler manufacturers, and remained with them during the period 1891-96; during period 1896-1904, engaged in business as Thayer & Co., Inc., makers of water tube steam boilers. In 1904,

went to New Castle, Delaware, to construct the works of the Baldt Steel Co., and has been Manager of the company since that time. This company manufactures all kinds of steel castings. In addition to a steel foundry, the company built an open hearth steel plant consisting of three thirty-ton Siemens-



Martin acid open hearth furnaces. Also Vice-President of Baldt Steel Co., and Director of the Federal Terra Cotta Co., and First National Bank (Wilmington).

Member of Puritan Club, Boston; Calumet and Metropolitan Clubs, New York; Markham and Racquet Clubs, Philadelphia; Wilmington Club, Wilmington and Baltimore Club, Baltimore.

Business address: New Castle, Delaware.

Home address: Wilmington, Delaware.

WILLIAM ARTHUR THOMAS

PRESIDENT AND GENERAL MANAGER,
THE THOMAS STEEL COMPANY

BORN in Wales, June 8, 1865, son of Thomas B. and Margaret (Davies) Thomas. Educated in public schools of Niles, Ohio.

For a period of about fifteen years was engaged in the dry goods business. When the American Sheet Steel Co., was formed, disposed of his dry goods interests and entered the sheet business, organizing the Niles Iron



& Sheet Company with a capital stock of \$100,000. After operating under this name for about four years, Mr. Thomas and his brothers purchased all the holdings of other parties originally in the company and reorganized the company and increased the capital invested to half a million dollars, giving the re-

organized company the name of The Thomas Steel Co. The company now has a plant containing ten hot sheet mills with galvanizing and corrugating departments.

Director and Chairman of the Finance Committee of the Niles Trust Company of Niles, Ohio and Director of the Standard Boiler and Plate Iron Company.

Member of Duquesne Club, Pittsburgh; Union Club Cleveland; and Youngstown Club, Youngstown.

Business address: The Thomas Steel Co., Niles, O.

Home address: 830 Robbins Avenue, Niles, O.

ALEXIS W. THOMPSON

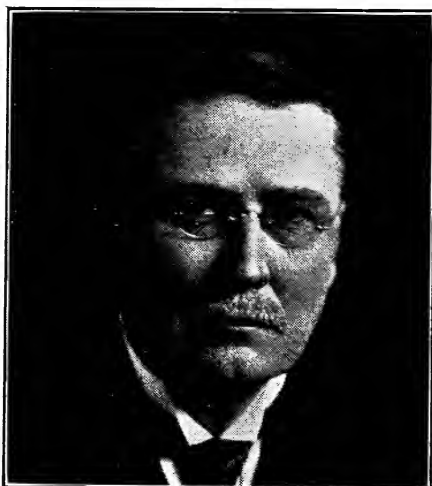
PRESIDENT,
INLAND STEEL COMPANY

BORN in Mercer County, Pa., November 30, 1850, son of David and M. J. (Webster) Thompson. Educated in public schools, Mercer Co., Pa. and Ashtabula Co., O.

From 1875 to 1893, Secretary and Treasurer of Etna Iron Works, Ltd., New Castle, Pa.; 1893-1899, Vice-President of the Atlantic Iron & Steel Co. At the formation of the Republic Iron and Steel Co., became

Vice-President of the company and filled the position from May 15, 1899, to September, 1901.

In September, 1901, was elected President of the Republic Iron and Steel Co., and continued to hold this position until October 19, 1905. In April, 1906, joined the Inland Steel Co., of Chicago, Ill., and was subsequently elected



President of the company which position he now holds. Also a Director of the Sharpesville Furnace Co., and the United Iron and Steel Co.; and Director and member of the Executive Committee of the Benson Mines Co.

Member of the Chicago Club, Chicago; Duquesne Club, Pittsburgh; Metropolitan Club, New York; and Tavern Club, Cleveland. Trustee of the Shenango Valley Hospital, New Castle, Pa.

Business address: Inland Steel Co., Chicago, Ill.

Home address: Chicago Club, Chicago, Ill.

THOMAS FRAME THOMSON

CHAIRMAN, BOARD OF DIRECTORS,

OTIS STEEL COMPANY

BORN in Glasgow, Scotland, May 19, 1867, son of William Cooper and Margaret Miller (Frame) Thomson. Educated at Kelvinside Academy, Glasgow; Herbertshire Castle, Stirlingshire; and Glasgow University.

Became partner in the firm of Strain, Robertson and Thomson, 1890-95; from 1895-1900, engaged in practice as civil engineer in steam railway work; since 1900,



engaged in the consolidation of the street railway systems of Buenos Ayres, Montevideo and Cordoba; Deputy Chairman, United Electric Tramways of Montevideo; Deputy Chairman, Cordoba Light, Power and Traction Co.; Member of Board and Executive Committee, Compagnie Generale de Tramways de Buenos

Ayres; Chairman, Board of Directors, Otis Steel Co., Ltd.

Member, Institution of Civil Engineers (England); Societe des Ingenieurs de France, The Iron and Steel Institute (England); Fellow Royal Scottish Geographical Society; Member, Middle Temple (London); Associate, American Street and Interurban Railway Assn.

Member, Progreso Club (Buenos Ayres), several London Clubs and Golf Clubs.

Business address: 62 London Wall, London.

Home address: Caen Wood Towers, Highgate, London.

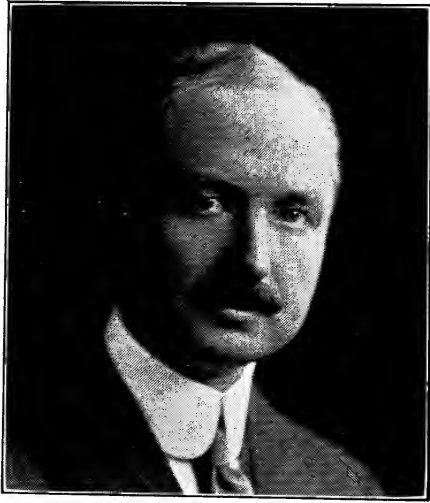
GEORGE G. THORP

VICE-PRESIDENT,
INDIANA STEEL COMPANY

BORN in Pittsburgh, Pa., June 29, 1868, son of J. M. and J. H. (Veeder) Thorp. Graduate of University of Wisconsin, B. M. E., 1891. Holder of Fellowship in Mechanical Engineering, University of Wisconsin, 1891-92.

During period 1892-1895, was employed at the North and Joliet Works of the Illinois Steel Co.; in 1895, left to accept the position of Master Mechanic and Chief

Engineer with the Colorado Fuel & Iron Co. In 1898, returned to the Illinois Steel Co. as Assistant General Superintendent and later General Superintendent of Joliet Works, Illinois Steel Co.; 1901-1905, General Superintendent, Clairton Works, Carnegie Steel Co.; 1905 to date, Second Vice-President of the Illinois Steel



Co., and Vice-President, Indiana Steel Co. Had general charge of the construction of the Gary Steel Works, Gary, Indiana.

Member, American Society of Mechanical Engineers; Chi Psi Fraternity. Member of Duquesne Club, Pittsburgh; Chicago, University and Chicago Yacht Clubs, Chicago.

Business address: 1528 Commercial National Bank Building, Chicago, Ill.

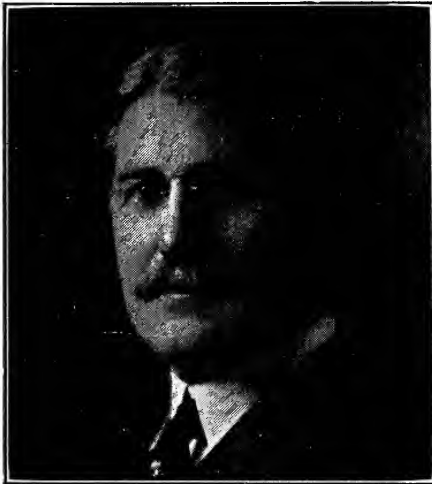
Home address: Lake Shore Drive, Evanston, Ill.

GEORGE M. VERITY

PRESIDENT AND GENERAL MANAGER,
THE AMERICAN ROLLING MILL COMPANY

BORN in East Liberty, Logan Co., Ohio, April 22, 1865, son of Rev. Jonathan and Mary (Deaton) Verity, graduate of High School, Georgetown, Ohio, and Nelson Business College, Cincinnati, Ohio.

During period 1884-86, was manager, W. C. Standish Grocery Company, Cincinnati; 1886-1889, Manager of The Sagendorph Iron Roofing & Corrugating Co., Cincinnati; 1889-1891, held the same position with The American Steel Roofing Co., successor to the company last named; 1891 to 1900, Vice-President and General Manager of this company. This company was absorbed by the American Rolling Mill Co., of which Mr. Verity has been President and General Manager since its



organization. Also Director and Member of Executive Committee, Westinghouse Electric & Mfg. Co., and Director of Fifth-Third National Bank (Cincinnati) and First National Bank (Middletown).

Member of Duquesne Club, Pittsburgh; Dayton City Club, Dayton Country Club; Hamilton Club; Business Men's Club, Cincinnati; Ohio Society, New York; Navy League; a Mason.

Business address: Middletown, O.

Home address: 534 S. Main St., Middletown, O.

JEPHTHA HOMER WADE

VICE-PRESIDENT,
THE CLEVELAND-CLIFFS IRON COMPANY

BORN in Cleveland, Ohio, October 15, 1857, son of Randall P. and Anna R. (McGaw) Wade. Educated in public schools of Cleveland, Ohio, and by private tutor. Degree of A. M., Western Reserve University.

At present Vice-President of The Cleveland-Cliffs Iron Co., also President of Montreal Mining Co., Kalamazoo, Allegan and Grand Rapids Ry.; Vice-President of Bank of Commerce and Cleveland Stone Co.; Chairman of Board of Directors, Citizens Savings and Trust Co.; Director of Guardian Savings and Trust Co., Cleveland Railway Co., Grasselli Chemical Co., National Refining Co., and Sandusky Portland Cement Co.



Member of Union, University, Country, Roadside and Hunt Clubs, Cleveland, O. Member of Loyal Legion.

Trustee of Western Reserve University, Adelbert College, Lake View Cemetery, Garfield Memorial Association, Lakeside Hospital, Huron Road Hospital, University School, Protestant Orphan Asylum, Children's Aid Society, Cleveland Museum of Art, Cleveland School of Art.

Business address: Wade Building, Cleveland, Ohio.

Home address: 2 East 45th Street, New York City.

JAMES C. WALLACE

PRESIDENT,

AMERICAN SHIPBUILDING COMPANY

BORN in Cleveland, Ohio, May 23, 1865, son of Robert and Lydia (Davis) Wallace. Educated in the public schools of Cleveland, Ohio.

Started at an early age to learn the shipbuilding and machinist trades in Cleveland, O. Entered the employ of the Cleveland Shipbuilding Co. and was promoted through various grades to the full charge of the drafting



department. After serving about five years in this capacity, was elected Vice-President and General Manager of the Cleveland Shipbuilding Co. This company was absorbed in 1899 by the American Shipbuilding Co. After filling the position of Vice-President and General Manager of the Cleveland Shipbuilding

Co. for six years, Mr. Wallace in 1902, was appointed General Manager of the American Shipbuilding Co. and in 1905, was elected President of the company which position he has continued to fill to the present time.

Business address: Cleveland, O.

Home address: Cleveland, O.

RALPH COLLINGWOOD WATROUS

SECOND VICE-PRESIDENT,
RHODE ISLAND PERKINS HORSE SHOE COMPANY

BORN in Mystic, Conn., July 19, 1866, son of Leonard and Mary (Nichols) Watrous. Educated in the public schools of Mystic, Conn.

Was for many years engaged in the real estate business in Providence, R. I., beginning in 1894. In October 1908, was elected Second Vice-President of the Rhode Island Perkins Horse Shoe Company which position he still continues to fill. Pres-

ident of the Ralph C. Watrous Company and Trustee of the Rhode Island Safe Deposit Company. President since 1904, of the Wood River Branch Railroad Company, operating a small steam railroad from Wood River Junction to Hope Valley, R. I.



Prominent in Rhode Island politics for many years and elected Lieutenant Governor of Rhode Island in 1907-1908.

Member of the Hope Club, Agawam Hunt Club and Squantum Club, Providence. Director of the Rhode Island Society for the Prevention of Cruelty to Children.

Business address: 49 Westminster St., Providence, R. I.

Home address: 20 Diman Place, Providence, R. I.

GEORGE W. WATTS

WORKS MANAGER,
CANADIAN GENERAL ELECTRIC COMPANY

BORN in Devonshire, England, April 25, 1862, son of Thomas and Anne (Carrick) Watts. Educated in the public schools and at Collegiate Institute, Toronto.

Began as an accountant and after six years' experience, took up civil engineering, being engaged for six years in bridge building and railroad location and construction. In 1890, became Assistant Manager of Tor-



onto Construction and Electrical Supply Co. In 1892, became associated with the Canadian General Electric Co., serving from 1892 to 1902, as Assistant to the General Manager. Since 1902, has held the dual position of Works Manager of Canadian General Electric Co. and Canada Foundry Co.

Member of American Institute of Electrical Engineers, American Society of Mechanical Engineers, American Electro-chemical Society, American Foundrymen's Association, Canadian Railway Club; National Founders' Assn.; National Metal Trades Assn.; Canadian Manufacturers' Association and Toronto Board of Trade. Member of Engineers' Club and Royal Canadian Yacht Club, Toronto, and Peterboro Club, Peterboro. Masonic Fraternity and Shriner.

Business address: 212 King Street, West, Toronto.

Home address: 1 Beaumont Road, Toronto.

ERNEST TENER WEIR

PRESIDENT,

PHILLIPS SHEET AND TIN PLATE COMPANY

BORN in Pittsburgh, Pa., August 1, 1875, son of James and Margaret (Manson) Weir. Educated in public schools of Pittsburgh.

Started with the Braddock Wire Co., as clerk in 1890; 1891-1898, with the Oliver Wire Co., in various capacities. In 1898, became Assistant to the District Manager of American Tin Plate Co., Pittsburgh; in 1900, Manager of the Pittsburgh Works of the company, and in 1903, Manager of the Monessen Works. In 1905, with James R. Phillips, of Pittsburgh, organized the Phillips Sheet & Tin Plate Co., and purchased the Jackson Iron & Tin Plate Co., of Clarksburg, W. Va. Was Secretary and General Manager of this company until



1908, when he became President. Built the town of Weirton, W. Va., and erected a twenty mill tin plate plant there in 1909-1910. Also President, Clarksburg Foundry & Machine Co., Bank of Wierton, and Weir Improvement Co.; Director, Pennfield Coal & Coke Co.

Member of Duquesne, Union Clubs and Pittsburgh Athletic Association of Pittsburgh; Fort Henry Club, Wheeling; Triton Club, Quebec, Canada. A Mason.

Business address: Weirton, W. Va.

Home address: Pittsburgh, Pa.

ANDREW WHEELER

PARTNER,

MORRIS, WHEELER & COMPANY

BORN in Philadelphia, Pa., January 2, 1866, son of Andrew and Sarah Caroline (Carpenter) Wheeler. Educated at William Penn Charter School, Philadelphia; St. Paul School, Concord, N. H.; and University of Pennsylvania, Class of 1885, Wharton School of Finance and Economy.

In April, 1884, entered the office of Morris, Wheeler



& Co., Iron and Steel merchants and in January, 1892, was admitted to junior partnership; since January, 1904, a senior partner of the firm. Became a Director of the Pottstown Iron Co. in 1894, and was Secretary, 1894 to 1900. Was elected Vice-President in 1911. Is also a Director of the Breakwater Co. Since

1903, Treasurer of the American Iron and Steel Association.

Member, Iron and Steel Merchants Association of Philadelphia. Member, Rittenhouse, Racquet, Rabbit and Musical Art Clubs, and Swedish Colonial Society, Philadelphia; Merion Cricket Club, Haverford; Zeta Psi Fraternity. Secretary and member of Executive Committee of the Philadelphia Orchestra Association.

Business address: 1608 Market St., Philadelphia, Pa.

Home address: 2137 Locust St., Philadelphia, Pa.

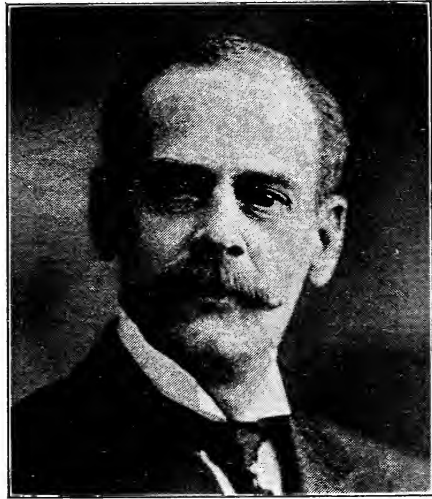
HARLOW BELDING WHEELER

SECRETARY AND TREASURER,
AMERICAN SHEET AND TIN PLATE COMPANY

BORN in Mount Vernon, Iowa, September 7, 1858, son of David H. and Sophia E. (Seymour) Wheeler. Educated in the public schools of Evanston, Ill.

During the earlier part of his business career was engaged in the agricultural implement business at Rockford, Ill. In the spring of 1899, became Assistant Treasurer of the National Steel Company, and soon after was

successively elected to the same office in the organizations of the American Tin Plate Company, American Sheet Steel Company, American Steel Hoop Company, and the American Can Company. In 1902, discontinued his connections with the National Steel Company, American Steel Hoop Company, and the



American Can Company, and accepted the position of Secretary and Treasurer of the American Sheet Steel Company, and American Tin Plate Company, and continued in the same position when these companies were united in the American Sheet & Tin Plate Company, in December, 1903.

Business address: Frick Building, Pittsburgh, Pa.
Home address: 270 Grant St., Sewickley, Pa.

GEORGE STUART WHYTE

PRESIDENT,

MACOMBER & WHYTE ROPE COMPANY

BORN in Crossgates, Fifeshire, Scotland, March 20, 1867, son of George and Isabella (Primrose) Whyte. Educated in the public schools of Crossgates, Scotland, and Evening High Schools, Chicago, Ill.

In February, 1887, entered the employ of the Washburn & Moen Manufacturing Co., at their Chicago branch. In 1896, became connected with the Leschen-



Macomber-Whyte Co., a corporation of which he was one of the organizers. In 1900, the name of the corporation was changed to the Macomber & Whyte Rope Co. The company commenced the manufacture of wire rope in July, 1901, and high grade steel wire in May, 1910. Mr. Whyte was elected President and Director of

the company at the time of its organization in 1900.

Member of Rotary Club of Chicago, Chicago Athletic Association, Chicago Automobile Club, Beverly Country Club. Member Masonic Fraternity, Nobles of the Mystic Shrine, Royal League and Royal Arcanum.

Member of The Iron and Steel Institute of Great Britain.

Business address: 507 S. Clinton St., Chicago, Ill.

Home address: 5452 Michigan Boul., Chicago, Ill.

GEORGE D. WICK

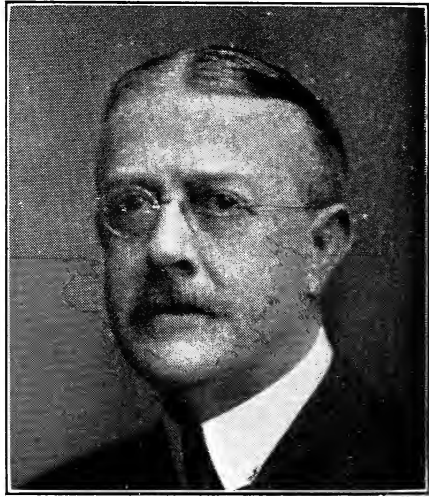
PRESIDENT,

THE EMPIRE IRON AND STEEL COMPANY

BORN in Youngstown, Ohio, June 24, 1854, son of Paul and Susan A. Wick. Graduate Williams College, Class of 1876.

In 1882, became President of Trumbull Iron Co., Girard, Ohio; in 1892, was made Vice-President, Union Iron and Steel Company, Youngstown, and in 1896, President of the Mahoning Valley Iron Co. When this

company was taken over by the Republic Iron & Steel Co., he became First Vice-President of the latter company. Organized and was elected President of the Youngstown Sheet and Tube Co., in 1901. In 1903, he retired from active business. Now Vice-



President of the First National Bank (Youngstown); Dollar Savings and Trust Co.; Director and member of Advisory Committee, Youngstown Sheet & Tube Co.; President and Director, The Empire Iron & Steel Co., The Garry Iron & Steel Co., the Federal Building Co., and the Paul Wick Real Estate Co.

Member of the Union Club, Cleveland; Youngstown Club, Youngstown; Mayfield Country Club, Cleveland; and the Mahoning Golf Club.

Business address: 403 Wick Building, Youngstown, O.

Home address: 656 Wick Avenue, Youngstown, O.

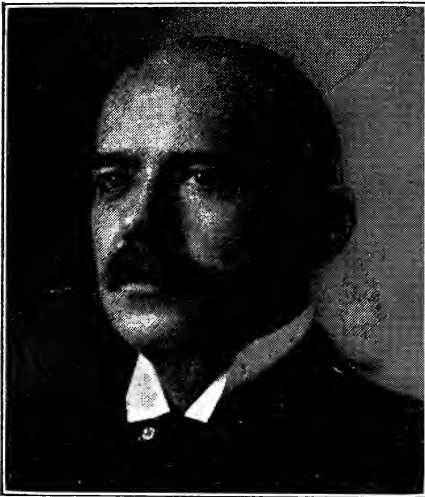
THEODORE HARVEY WICKWIRE

PRESIDENT,

WICKWIRE BROTHERS, INCORPORATED

BORN in Cortlandville, N. Y., March 29, 1851, son of Raymond and Elmira A. (Greenman) Wickwire. Educated at Cortlandville Academy and Cortland Normal School.

Entered the retail hardware business with his brother in 1873, forming the partnership of Wickwire Brothers. In 1875, sold the hardware business and continued in the



manufacture of wire cloth for window screens and other wire goods. First to produce window screen wire cloth with double sel-vage and from hard drawn wire woven under new principles. The firm was incorporated in 1891. Mr. Wickwire was Treasurer until the recent death of Mr. C. F. Wickwire when he became President.

Organized the Wickwire Steel Co. in 1907, and was elected President of the company. Also Vice-President, Second National Bank (Cortland, N. Y.); Director, First National Bank (Cortland, N. Y.).

Director, Auburn Theological Seminary, George Junior Republic, and Secretary of Local Board, State Normal School, Cortland, N. Y.

Member of the Hardware Club, New York City.

Business address: Cortland, N. Y.

Home address: 55 Tompkins St., Cortland, N. Y.

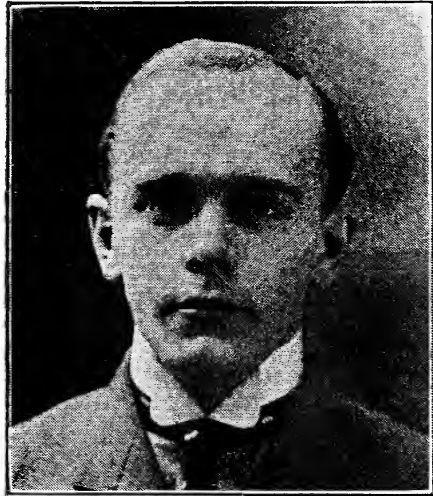
THEODORE HARRY WICKWIRE, JR.

VICE-PRESIDENT AND TREASURER,
WICKWIRE STEEL COMPANY

BORN in Cortland, N. Y., April 6, 1879, son of Theodore H. and Emma V. (Woodmansee) Wickwire. Educated at Phillips Andover Academy 1898, and Yale College A. B., 1903.

From 1903-1907, was successively Chemist, Superintendent of Open Hearth Dept., and Assistant Treasurer for Wickwire Brothers; assisted in the organization of

the Wickwire Steel Company in 1907 and in the construction of the Company's blast furnace plant at Buffalo. Was appointed Secretary and Treasurer of the Wickwire Steel Company in 1907 and later, Vice-President and Treasurer. Is also a Director in Wickwire Brothers, the American Steamship Company, the Caledonia



Steamship Company, the Lake Steamship Company, and Second National Bank of Cortland, N. Y. President of Civil Service Commission, Cortland, N. Y., 1904-6.

Member of American Chemical Society; Yale Club, New York City; Saturn Club, Country Club and Launch Club, Buffalo.

Business address: P. O. Station "B", Buffalo, N. Y.

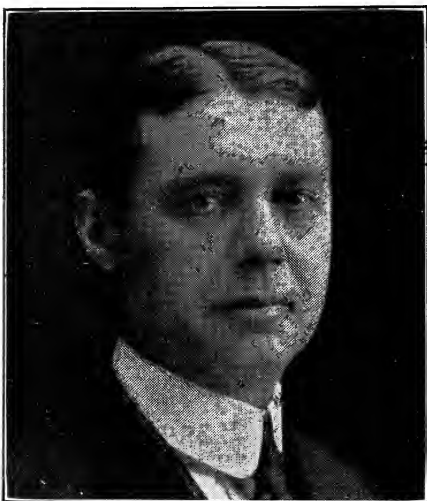
Home address: 1217 Delaware Avenue, Buffalo, N. Y.

HOMER DAVID WILLIAMS

GENERAL SUPERINTENDENT, DUQUESNE STEEL WORKS,
CARNEGIE STEEL COMPANY

BORN in Johnstown, Pa., August 19, 1863, son of James and Jane (Hamilton) Williams. Educated in the public schools of Johnstown, Pa.

In 1880, entered the laboratory of the Cambria Iron Company as a carbon boy. Left in 1885, in order to take a special course in chemistry and metallurgy for three terms at Lehigh University. For a short period,



was Chemist at the Joliet Works, Illinois Steel Co., and for two years, Chemist at the Colby Mine, Bessemer, Mich. Was with the Colorado Fuel & Iron Co. for five years as night Superintendent of the Bessemer Department and Rail Mill. During 1897-1899, with the Maryland Steel Co., Sparrows Point, Md., leaving

there in 1899 to take charge of the Bessemer Department at the Homestead Steel Works, Carnegie Steel Co. Was appointed Asst. General Supt. of the Homestead Works in 1902 and General Supt. of the Duquesne Steel Works in 1903. Also President of the Duquesne Trust Co. and Director of the Monongahela Trust Co.

Member of the Duquesne, University, German and Country Clubs and Athletic Association, Pittsburgh.

Business address: Duquesne, Pa.

Home address: Duquesne, Pa.

GEORGE EDWARD WISENER

GENERAL SUPERINTENDENT, MINGO AND BELLAIRE WORKS,
CARNEGIE STEEL COMPANY

BORN in Pittsburgh, Pa., December 10, 1866, son of Marquis and Mary (Krause) Wisener. Educated in public schools of Beaver, and at Geneva College.

Entered the shipping department of the Hartman Steel Works, Beaver Falls, Pa., in 1886, and in the following year secured employment with the Carnegie Steel Co., and has been with the company ever since. In 1887, was Assistant Recorder at the Homestead Works; 1889, head of Structural Shipping Department; 1892, Steel Blower, Bessemer Department; 1900, Foreman, Bessemer Department; 1902, Superintendent of Bessemer and Blooming Mills. In 1907, left the Homestead Works to become General Superintendent of Mingo and Bellaire Works, which position he now holds.



Member of School Board, Munhall, Pa., from organization to time of change of position in 1907, when he left Pittsburgh. Member of Duquesne Club, German Club and Pittsburgh Athletic Association, Pittsburgh, Pa., and Country Club, Steubenville, Ohio.

Business address: Mingo Junction, Ohio.

Home address: 1013 La Belle Ave., Steubenville, O.

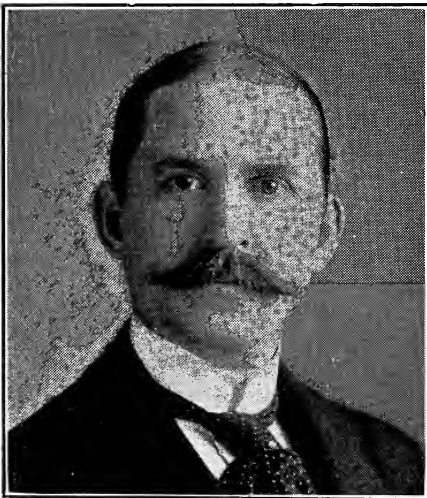
FRANK SPENCER WITHERBEE

PRESIDENT,

WITHERBEE, SHERMAN & COMPANY

BORN in Port Henry, New York, May 12, 1852, son of Jonathan G. and Charlotte (Spencer) Witherbee. Graduate of Yale University, B. A., 1874.

Succeeded his father on his death as partner in firm of Witherbee, Sherman & Co.; and when incorporated in 1900, was elected President of the company. From 1902-1906, was Vice-President, Tennessee Coal, Iron & R. R.



Co. Now President, Lake Champlain & Moriah R. R.; Cubitas Iron Ore Co.; Vice-Pres., Cheever Iron Ore Co.; Director, Equitable Life Assurance Soc., Fulton Trust Co., Chat-ham National Bank.; Cit-izen's National Bank, Port Henry, and Central Hudson Steamboat Co.

Many times delegate to Republican National and State Conventions and member N. Y. State Rep. Committee; Presidential Elector; National Committee.

Member, Amer. Institute Mining Engineers, Lake Superior Institute Mining Engineers. Trustee, Witherbee Memorial Assn., Mineville, and Sherman Free Library, Port Henry. Member of University, Union, Metropolitan, Republican and Strollers' Clubs, New York; Tuxedo Club, and Travellers' Club, Paris, France.

Business address: 2 Rector Street, New York City.

Home address: 4 Fifth Avenue, New York City.

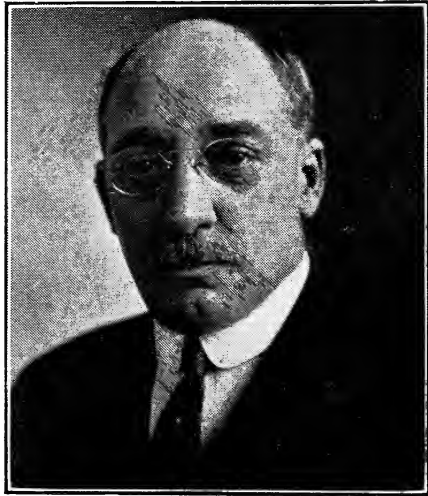
HARTLEY C. WOLLE

GENERAL SUPERINTENDENT,
CAMBRIA STEEL COMPANY

BORN in Bethlehem, Pa., October 23, 1857, son of Francis and Elizabeth C. (Weiss) Wolle. Educated at the Moravian Parochial School, Bethlehem, Pa.

Entered the iron and steel business in 1874, with the Bethlehem Steel Company, South Bethlehem, Pa., and remained with the company for twenty-five years, 1874-1899. In 1899, became connected with the Danville Bessemer Company which owned and operated blast furnaces, steel works and rolling mills at Danville, Montour Co., Pa.

In the fall of 1900, removed to Johnstown, Pa. and entered the employ of the Cambria Steel Company at first as Assistant Superintendent of the Bessemer Department. Remained in this position



until October, 1902, when he was appointed Mills Assistant to the general manager and served as such until November, 1909, when he was appointed General Superintendent of the Cambria Steel Company which position he now holds.

Member of the American Institute of Mining Engineers. Trustee of the Cambria Library, Johnstown, Pa.

Business address: Cambria Steel Co., Johnstown, Pa.

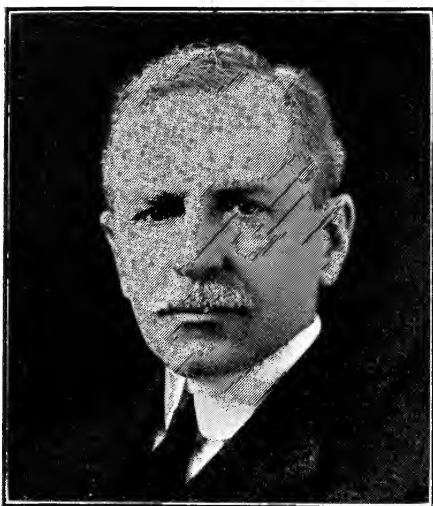
Home address: 344 Tioga St., Westmont, Johnstown, Pa.

FREDERICK WILLIAM WOOD

PRESIDENT,
MARYLAND STEEL COMPANY

BORN in Lowell, Mass., March 16, 1857, son of William and Elizabeth F. (Kidder) Wood. Educated in public schools of Lowell, Mass., and graduate of Massachusetts Institute of Technology, S. B., 1877.

Entered the service of the Pennsylvania Steel Co., in 1877, in the Open Hearth Department and became Superintendent of Blast Furnaces in 1880 and later



Assistant General Superintendent, General Superintendent and General Manager. In the latter capacity was in charge of the designing and construction of the plant at Sparrow's Point, begun in 1887, and on the organization of the Maryland Steel Co., in 1891, to operate this plant, was elected President of that Com-

pany. Also Vice-President, Pennsylvania Steel Co. of N. J.; Director of Spanish American Iron Co., Savings Bank of Baltimore, and Consolidated Gas, Electric Light & Power Co., Baltimore; Member, Board of Managers of Maryland Institute, and Board of Visitors, Baltimore Polytechnic Institute.

Member, Maryland, University and Merchants Clubs, Baltimore; Engineers' Club, N. Y.; University Club, Phila.

Business address: Sparrow's Point, Md.

Home address: Park Heights, Baltimore, Md.

RICHARD GILPIN WOOD

VICE-PRESIDENT,

ALAN WOOD IRON AND STEEL COMPANY

BORN in Woodale, near Wilmington, Del., February 24, 1849, son of W. Dewees and Rosalind H. (Gilpin) Wood. Educated at Friends Central School and Polytechnical College, Philadelphia, Pa.

In 1870, engaged with his father in the manufacture of sheet iron at McKeesport, Pa., as a member of the W. Dewees Wood Company, remaining there until 1901.

The McKeesport plant of the company was acquired by the American Sheet Steel Co. In 1904, became Vice-President and Director of the Alan Wood Iron & Steel Company, and in 1905, General Manager of the Steel Works Department of this company at Ivy Rock, Pa. Vice-President of the Upper Merion and Plymouth



R. R. Company, and Director of the First National Bank of Conshohocken, Pa.

Member of the Duquesne Club, Pittsburgh; Union League Club, Art Club and Merion Cricket Club, Philadelphia. Member of Old Pupils Association, Sons of the Revolution, and Netherlands Society of Philadelphia. Director, Rush Hospital, Philadelphia.

Business address: Morris Bldg., Philadelphia, Pa.

Home address: Bryn Mawr, Pa.

CHARLES HENRY ZEHNDER

VICE-PRESIDENT,

SCRANTON BOLT AND NUT COMPANY

BORN in Northumberland Co., Pa., April 16, 1856, son of Augustus and Mary E. (Schick) Zehnder. Educated in public schools and Danville (Pa.) Academy.

From 1873-78, clerk in Danville, Pa., National Bank; 1880-1896, with the Jackson & Woodin Mfg. Co., Berwick, Pa., serving successively as Secretary to Vice-President, Superintendent, Vice-President and General



Manager, and President; 1896-1901, President of the Dickson Manufacturing Co., Scranton, Pa.; 1902 to 1907, President, Alleghany Ore & Iron Co., of Virginia. Director in a large number of companies. Among others, the Empire Steel Co. (Vice-President), Crane Iron Works, Equitable Life Assurance Society of the

United States, Empire Trust Co. (New York), Union National Bank (Phila.) Member, Amer. Inst. of Mining Engineers; Amer. Soc. Mechanical Engineers; Franklin Institute. Member, Union League, Lawyers, Engineers, Railroad, N. Y. Athletic Clubs of New York; Union League Club, Philadelphia; Scranton Club, Scranton, Pa.; Westmoreland Club, Richmond, Va.; Deal Golf Club, Deal, N. J.; Allenhurst Club, N. J.

Business address: 140 Cedar Street, New York.

Home address: 110 Central Park West, New York.

EDWARD MARSHALL ZEHNDER

PRESIDENT,

SCRANTON BOLT AND NUT COMPANY

BORN in Mainville, Columbia Co., Pa., May 24, 1866, son of Augustus and Mary Elizabeth (Schick) Zehnder. Educated in the public schools of Danville, Pa.

Began his business career as clerk at the Glendower Iron Works, Danville, Pa., in 1884. In 1887, was made Inspector of Rails and Bars at the Montour Iron and Steel Co., Danville. In July, 1890, was appointed As-

sistant Superintendent of Rolling Mills for the Pennsylvania Bolt and Nut Co., Lebanon, Pa., and in 1892 became Superintendent, continuing in this position until 1899. In April of

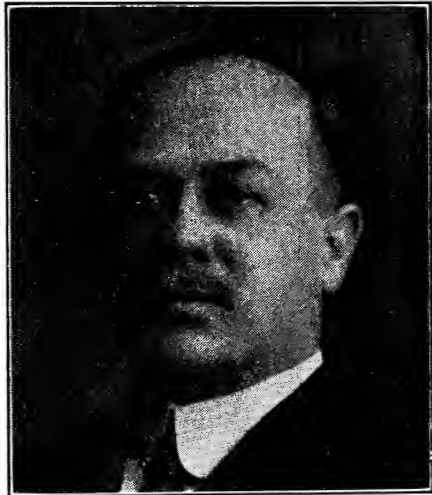
latter year, went to Scranton to take charge of the construction of the Scranton Bolt & Nut Co's works and later became the General Superintend-

ent of the company. Was elected President of the Scranton Bolt and Nut Co., May 25, 1906. Director of Pennsylvania Casualty Co., Scranton, Pa.

Member of Engineering Society of Northeastern Pennsylvania. Member of Engineers Club and Railroad Club, New York; Scranton Club and Country Club of Scranton.

Business address: Scranton Bolt & Nut Co., Scranton, Pa. and 90 West Street, New York.

Home address: 1025 Electric Avenue, Scranton, Pa.



AUGUST ZIESING

PRESIDENT,

AMERICAN BRIDGE COMPANY OF NEW JERSEY

BORN in Peru, Ill., February 19, 1858, son of Dr. Henry and Katherine (Brennemann) Ziesing. Educated in the public schools of Peru, and graduate of State University of Illinois, B. S., 1878; C. E., 1905.

From 1878 to 1880, with M. Lassig, bridge builder of Chicago; 1880-1882, engaged as engineer in charge of construction at Wooster, Ohio, for the Pennsylvania



R. R.; 1882 to 1897, with the Lassig Bridge Co., as Engineer and Manager. From 1897 to 1900, engaged in practice as Consulting Engineer, making a specialty of railroad structures; 1900-1905, Western Manager of the American Bridge Co. Since 1905, President of the American Bridge Co. Also President, Empire

Bridge Co., and Director, Canadian Bridge Co.

Member of American Society of Civil Engineers, Western Society of Engineers, American Railway and Maintenance of Way Association. Member of Union League, University and Engineers' Clubs of Chicago; Engineers' Club, New York; Duquesne Club and Pittsburgh Athletic Association, Pittsburgh; Skokie Country Club, Glencoe, Ill.

Business address: 72 West Adams St. Chicago, Ill.

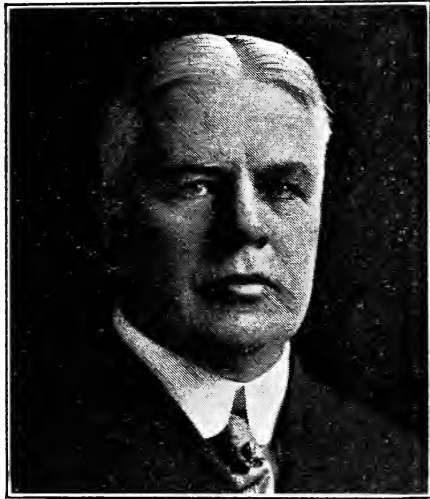
Home address: Glencoe, Ill.

FRANK BILLINGS

PRESIDENT,
THE TOD-STAMBAUGH COMPANY

BORN in Hastings, New York, September 27, 1853.

President of the Tod-Stambaugh Company of Cleveland, Ohio, sales agents, shippers and miners of iron ores. The company owns extensive interests in Lake Superior iron ore properties.



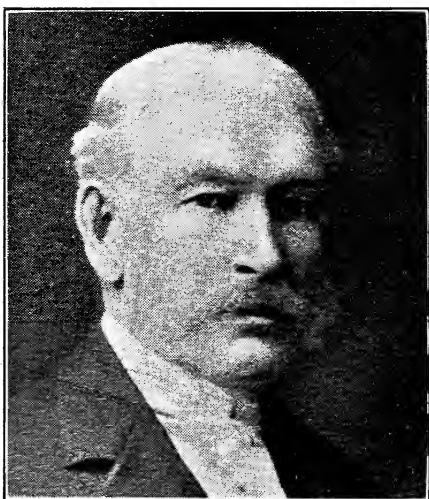
Business address: Cleveland, Ohio.

Home address: 2728 Euclid Ave., Cleveland, Ohio.

DEXTER B. CHAMBERS

SECRETARY,
STEWART IRON COMPANY, LIMITED

BORN in Denmark, Lewis Co., N. Y., son of Rufus C. and Elizabeth P. (Wilbur) Chambers. Educated at Lowville Academy.



Was Secretary of Brown, Bonnell & Company, Youngstown, Ohio, from January, 1882, until the failure of the firm in 1883, at which time Mr. Fayette Brown of Cleveland was appointed Receiver. Acted as Mr. Brown's agent at the office of Brown, Bonnell & Company until 1887. In December, 1889, became Sec-

retary of the Stewart Iron Company, Limited, of Cleveland, Ohio, and Sharon, Pa., and is still acting in that capacity.

Member of the Cleveland Chamber of Commerce. Member of Union Club, Country Club and Rowfant Club of Cleveland; and Engineers' Club, New York.

Business address: Perry-Payne Bldg., Cleveland, O.
Home address: 3250 Euclid Ave., Cleveland, O..

CHESTER RUSSELL HUBBARD

PRESIDENT,
WHEELING STEEL AND IRON COMPANY

BORN in Wheeling, West Virginia, October 25, 1848, son of Chester D. and S. P. Hubbard. Educated in the public schools of Wheeling, W. Va.

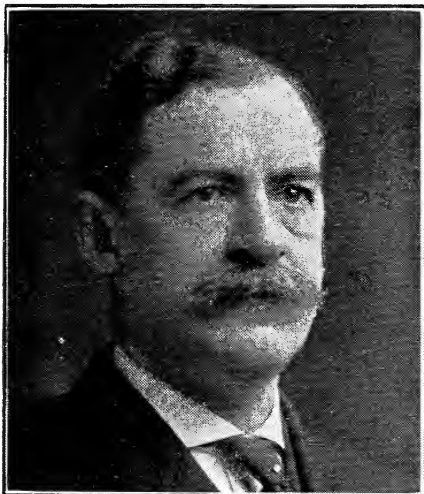
First engaged in the iron business in 1873 in Wheeling, West Virginia. At the organization of the Wheeling Steel and Iron Company, in 1892, was elected President of the company and still holds that position.

Also Vice-President of the Wheeling Tile Co.; Director of the Hazel-Atlas Glass Co., and the National Bank of West Virginia, Wheeling, W. Va. Director of the Wheeling Board of Trade.

President of the Fort Henry Club, Wheeling, W. Va.

Business address: Wheeling, W. Va.

Home address: Wheeling, W. Va.

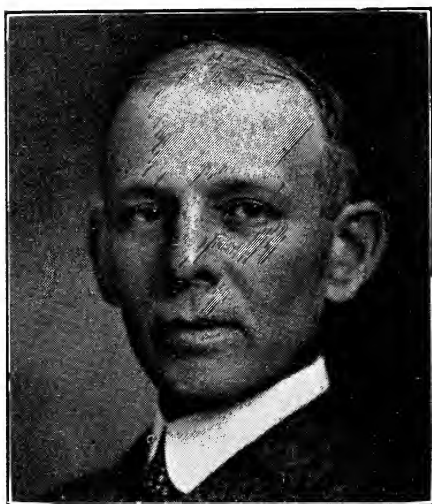


ALEXANDER JARECKI

SECRETARY,

JARECKI MANUFACTURING COMPANY

BORN in Erie, Pa., April 19, 1866, son of Charles and Louisa (Becker) Jarecki. Educated at Erie Academy and at the Massachusetts Institute of Technology, in



the mechanical engineering course, Class of 1888.

Secretary of the Jarecki Manufacturing Co.; Vice-President of the Continental Rubber Works; Director of the Perry Iron Co. and Second National Bank, Erie, Pa.

Member of the American Society of Mechanical Engineers; American Society for Testing Materials and the National Foundrymen's Association; Treasurer and member of the Board of Management of the Hamot Hospital, Erie, Pa. Member of Engineers Club, New York; Erie Club, Kahkwa Club and Country Club, Erie, Pa.

Business address: Erie, Pa.

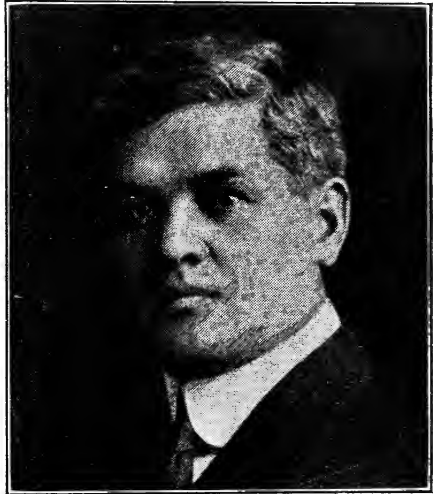
Home address: 305 Sixth Street, Erie, Pa.

MAX McMURRAY

GENERAL MANAGER OF BLAST FURNACES,
M. A. HANNA & COMPANY

BORN in Toronto, Canada, son of J. H. and Elizabeth (Whittaker) McMurray.

Started with the Illinois Steel Co., at South Works in October, 1890; became Assistant General Superintendent of the Joliet Works in 1896; made General Superintendent of the Newburgh Works, American Steel Wire Co., in 1900; became associated with M. A. Hanna & Co. in 1904 as General Manager of Blast Furnaces. Also General Manager, United Iron & Steel Co., Detroit Iron & Steel Co., and General Manager and Director, Penn Iron & Coal Co.



Member, American Institute of Mining Engineers. Member of Union, Tavern, Country, Roadside, and Hunt Clubs, Cleveland, Ohio, and Detroit Club, Detroit, Mich.

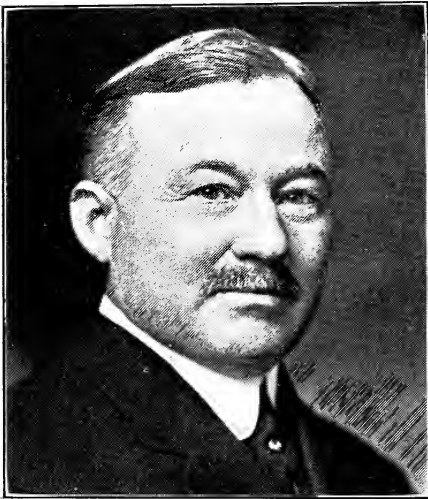
Business address: Cleveland, Ohio.

Home address: Lake Shore Boulevard, Cleveland, O.

J. P. K. MILLER

CHIEF ENGINEER,
H. C. FRICK COKE COMPANY

Served in the Civil Engineering Departments of the



Pittsburgh & Western Railroad Company and the Pittsburgh & Lake Erie Railroad Company from 1881 to 1884. Was Chief Engineer of the McClure Coke Company from 1884 to 1895. Since 1895, has served as Chief Engineer of the H. C. Frick Coke Co., with headquarters at Scottdale, Pa.

Business address: Scottdale, Pa.

Home address: Scottdale, Pa.

JAY MORSE PICKANDS

PICKANDS, MATHER AND COMPANY

BORN in Marquette, Mich., February 21, 1880, son of James and Caroline (Outhwaite) Pickands. Educated at the University School, Cleveland, Ohio, and at Yale University, New Haven, Conn. Graduated from Yale University with the degree of B. A. in 1902.

After graduation, engaged in business with the firm of Pickands, Mather and Co., Cleveland, Ohio, and has been connected with the Sales Department continuously since that time.



Member of the Union Club, Tavern Club, and Mayfield Country Club of Cleveland, Ohio. Member and Director of the Country Club of Cleveland and the Cleveland Athletic Association of Cleveland, Ohio.

Business address: Pickands, Mather & Co., Cleveland, O.

Home address: Lake Shore Boulevard, Cleveland, O.

EUGENE PEEPLES THOMAS

PRESIDENT,

UNITED STATES STEEL PRODUCTS COMPANY

BORN in Atlanta, Georgia, son of Colonel Lovick Pierce and Jane (Peeples) Thomas. Educated in the public schools of Atlanta, Georgia.

Entered the employ of the Johnson Company of Johnstown, Pa., in their branch office in Atlanta, Ga. in 1892, and in 1894, became Assistant Southern



Agent for the company. In 1899, went to London, England, in behalf of The Lorain Steel Company, successors to the Johnson Company and was subsequently made Assistant Foreign Manager. On the formation of the United States Steel Products Export Company (now known as the United States Steel Products Company) in

1903, returned to New York to take charge of a department of the company, and in 1906, became Assistant to President, Mr. J. A. Farrell. On February 1, 1911, when Mr. Farrell became President of the United States Steel Corporation, Mr. Thomas was elected President of the United States Steel Products Company.

Business address: 30 Church Street, New York City.

Home address: Plainfield, N. J.

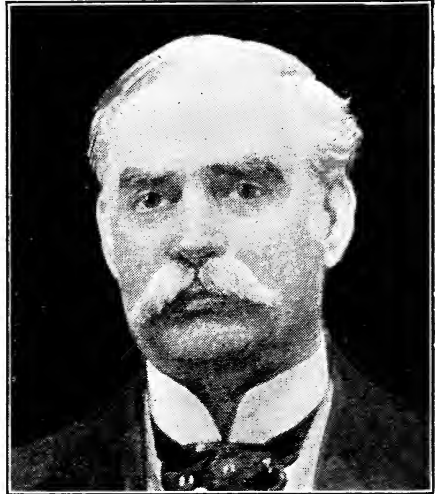
JOSEPH EARLSTON THROPP

MANUFACTURER

BORN in Valley Forge, Chester County, Pa. Educated in the public schools and graduate of the Polytechnic College of the State of Pennsylvania in 1868 with the degree of Civil Engineer.

Engaged in his profession in Minnesota reaching the rank of division engineer within sixteen months. Entered the iron business in 1870.

Representative from Pennsylvania in the Fifty Sixth Congress, 1899-1901.



Business address: Earlston, Bedford Co., Pa.

Home address: 1701 20th St., N.W., Washington, D.C.

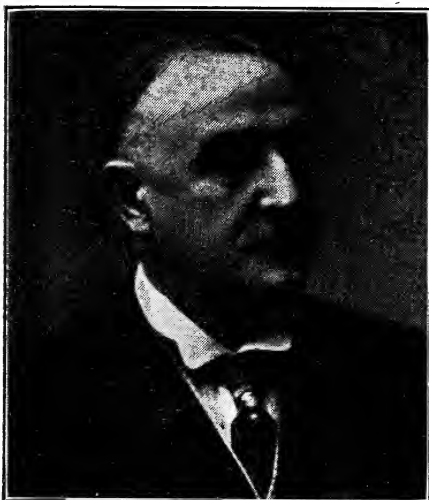
In Summer: Earlston, Bedford Co., Pa.

WILLIAM LUKENS WARD

PRESIDENT,

RUSSELL, BIRDSALL & WARD BOLT AND NUT COMPANY

BORN in Greenwich, Conn., September 2, 1856, son of William E. and T. (Lukens) Ward. Educated at the Friends School, 15th Street, New York City, and afterward at the Columbia University School of Mines, Class of 1878.



President of the Russell, Birdsall & Ward Bolt and Nut Company. Presidential Elector in 1896. Served in the Fifty-Fifth Congress as Representative from the Sixteenth New York District.

Member of the Engineers Club and Republican Club, New York.

Business address: Port Chester, New York.

Home address: Port Chester, New York.

JOHN HILL WHITING

PRESIDENT,

WHITING FOUNDRY EQUIPMENT COMPANY

Educated in the public schools of Detroit, Michigan. President of the Whiting Foundry Equipment Company, Harvey, Ill. near Chicago. The company designs and equips iron, brass, car, wheel and pipe foundries, and malleable and steel casting plants, furnishing complete equipment of cranes, cupolas, tumblers, core ovens, converters, open hearth and malleable furnaces, ladles, industrial cars, tramrail systems, etc., etc.

Member of the Chicago, Union League, Onwentsia and Calumet Golf Clubs, Chicago.

Business address: Harvey, Ill.

Home address: 1362 Dearborn Ave., Chicago, Ill.



HORACE ALEXANDER BEALE, JR.

PRESIDENT,

THE PARKESBURG IRON COMPANY

BORN at Old Hibernia Iron Works, Chester Co., Pa., February 10, 1870, son of Horace Alexander and Ellen Mary (Mendenhall) Beale. Educated in private schools, Ury House, Fox Chase, Pa.; St. Lukes, Bustleton, Pa.; Hill School, Pottstown, Pa., and at Haverford College, Haverford, Pa.

President of Parkesburg Iron Co.; Director, National Bank of Chester Valley, and Parkesburg Electric Light, Heating and Power Company.

Member, American Institute of Mining Engineers, American Society for Testing Materials, and the Franklin Institute of Philadelphia. Member of Art, Union League, University, Racquet, Philadelphia Automobile, Quaker City Automobile Clubs of Philadelphia, Pa.; Automobile Club of America, New York; Pittsburgh Athletic Association, Pittsburgh, Pa.; Merion Cricket Club, Haverford, Pa.; Wilmington Club, Wilmington, Del. Trustee of Coatesville Hospital, Coatesville, Pa.

Business address: Parkesburg, Pa.

Home address: Parkesburg, Pa.

JAMES ABERCROMBIE BURDEN

PRESIDENT,
BURDEN IRON COMPANY

BORN in New York City, January 16, 1871, son of James Abercrombie and Mary (Irvin) Burden. Educated at Cutler's School, New York City, by private tutors and graduate of Harvard University, A. B., 1893.

After graduation, joined the Burden Iron Company, of Troy, N. Y., which has a blast furnace, rolling mill, and rivet and horseshoe works at Troy and produces merchant bars, rivets and horse-shoes. Was elected Vice-President of the Burden Iron Company in 1900, and President of the company in 1906. Also Vice-President and Chairman of the Executive Committee of the Eastern Steel Company; Director of the O'Rourke Engineering Construction Company, Port Henry Iron Ore Company, Windsor Trust Company (New York), and United National Bank, Troy, N. Y.

Member of Knickerbocker, Union, University, Racquet and Tennis, New York Yacht, City, Automobile, Mid-Day and Harvard Clubs, New York; Meadowbrook Club; Sons of the Revolution.

Business address: Burden Iron Co., Troy, N. Y.

Home address: 7 East 91st Street, New York City.

HENRY CHALFANT

PRESIDENT,

SPANG, CHALFANT & COMPANY, INCORPORATED

BORN in Allegheny County, Pa., September 17, 1867, son of John W. and Ellen McC. Chalfant. Graduate of Harvard University, A.B., 1890.

After graduating, became connected with Spang Chalfant & Co., Incorporated, Pittsburgh, Pa. and was Secretary and Treasurer of the company until 1901 when he succeeded George A. Chalfant as President. The company owns and operates the Etna Iron and Tube Works, Etna, Pa. This was the first mill to use natural gas exclusively.

Business Address: Pittsburgh, Pa.

Home address: 915 Ridge Ave., Pittsburgh, Pa.

BERTRAND DAWSON COLEMAN

RESIDENT DIRECTOR,

PENNSYLVANIA STEEL COMPANY

Entered the iron and steel business in 1889, when he became associated in the management of the Lebanon Furnaces belonging to his father's estate and was actively engaged in the management of these furnaces up to July 1, 1901, when they were sold to the Pennsylvania Steel Company. Since that time has been Resident Director of the Pennsylvania Steel Company in Lebanon, Pa., in charge of the management of their ore and furnace properties in Lebanon County.

Business address: Lebanon, Pa.

Home address: Lebanon, Pa.

HERBERT DUPUY

CHAIRMAN,

CRUCIBLE STEEL COMPANY OF AMERICA

BORN in Chicago, Ill., May 10, 1856, son of Charles M. and Ellen M. (Reynolds) DuPuy. Graduate of Lehigh University in class of 1878.

Chairman of the Executive Committee and Director of the Crucible Steel Company of America, and of the Pittsburgh Crucible Steel Company; President of the Connellsville-Central Coke Company, the Goodwin Sand and Gravel Company, the Pennsylvania Rubber Company, the Morewood Realty Holding Company and the Lansing Realty Holding Company; Director of the Allegheny Heating Company, the Farmers Deposit National Bank, Farmers Savings Bank, the Reliance Life Insurance Company, Standard Roller Bearing Company and Crucible Coal Company.

Business address: Empire Bldg., Pittsburgh, Pa.

Home address: 646 Morewood Ave., Pittsburgh, Pa.

EDMUND WATERMAN DWIGHT

PRESIDENT AND TREASURER,
CHESTER STEEL CASTINGS COMPANY

BORN in Philadelphia, Pa., in 1864, son of Edmund Parsons and Clara (Waterman) Dwight. Educated at the University of Pennsylvania, Philadelphia, Pa.

President, Treasurer and Director of the Chester Steel Castings Company, Philadelphia, Pa.; Treasurer and Director of the Kingston Coal Company, Kingston, Pa.; Director of the Deposit and Savings Bank, Kingston, Pa., the North Pennsylvania Railroad Company, Phila., Pa., and the Delaware and Bound Brook Railroad Company, Trenton, N. J.

Member of the Franklin Institute, Phila., Pa.

Business address: 407 Sansom St., Philadelphia, Pa.

Home address: 1729 Walnut St., Philadelphia, Pa.

RICHARD GARLICK

TREASURER,

THE YOUNGSTOWN SHEET AND TUBE COMPANY

BORN in Youngstown, Ohio, November 2, 1871, son of Henry W. and Sarah S. (Ford) Garlick. Graduate of Yale University, Sheffield Scientific School, Ph. B., 1893.

After graduation, joined The Lloyd Booth Co., of Youngstown, Ohio, in the capacity of machinist and was promoted through several grades to the post of Secretary of the company in 1897, which position he filled for four years, 1897-1901. In 1901, Mr. Garlick was elected Treasurer of the Youngstown Sheet and Tube Company and has held this position continuously ever since. Also Director of the United Engineering and Foundry Company, the Concrete Stone and Sand Company, the First National Bank (Youngstown); The Dollar Savings and Trust Company (Youngstown); and The Exchange National Bank (Pittsburgh).

Member of University Club and Yale Club, New York; Duquesne Club, Pittsburgh; Youngstown Club, Youngstown; and Berzelius Club (Yale).

Business address: Youngstown, Ohio.

Home address: Wick Ave., Youngstown, Ohio.

EUGENE LAWRENCE MESSLER

GENERAL SUPERINTENDENT, PITTSBURGH OVENS AND FURNACES,
JONES & LAUGHLIN STEEL COMPANY

BORN in Allegheny, Pa., April 6, 1873, son of Thomas D. and Maria (Varick) Messler. Graduate of Yale University, Sheffield Scientific School, Ph.B., 1894.

Began in the pattern shop of the Edgar Thomson Works, Carnegie Steel Co., in November, 1894. In May, 1895, was made engineer for construction, Blast Furnaces, Duquesne Works and in August of same year, became General Superintendent of Labor; was made Assistant Furnace Superintendent in August, 1896. In April, 1900, became General Superintendent, Eliza Furnaces, Jones and Laughlin Steel Co.; in January, 1901, General Superintendent of Coke Ovens and Eliza Furnaces; in January, 1908, General Superintendent of Coke Ovens and Pittsburgh Furnaces. Also President, Eureka Fire Brick Works.

Member of Iron and Steel Institute, Great Britain; Engineers' Society of Western Pennsylvania, Electrochemical Society, and National Geographic Society. Member of Pittsburgh, Pittsburgh Golf and Allegheny Country Clubs, and Pittsburgh Athletic Association, Pittsburgh.

Business address: Pittsburgh, Pa.

Home address: 5423 Forbes Street, Pittsburgh, Pa.

FRANK CALVIN ROBERTS

CIVIL ENGINEER

BORN in New York City, June 30, 1861, son of Rev. William (D.D.) and Catherine (Parry) Roberts. Graduate of Princeton University, Class of 1883, with degree of Civil Engineer. Honorary degree, M. A., 1903.

Sole member of the firm of Frank C. Roberts & Co., Civil Engineers. Director of the Real Estate Trust Company of Philadelphia.

Member of the Iron and Steel Institute of Great Britain and the American Institute of Mining Engineers. Member of Union League Club and Princeton Club, Philadelphia; and Merion Cricket Club, Haverford, Pa.

Member of the Advisory Board of the Presbyterian Orphanage, Philadelphia. Member of the Graduate Council of Princeton University.

Business address: Philadelphia, Pa.

Home address: Wynnewood, Pa.

HENRY HAMILTON STAMBAUGH

PRESIDENT,

BRIER HILL IRON AND COAL COMPANY

BORN in Youngstown, Ohio, son of John and Caroline Stambaugh. Educated at Cornell University, Class of 1881.

For many years connected with The Brier Hill Iron and Coal Company as Secretary and Treasurer, and recently as President of the Company.

Business address: Youngstown, Ohio.

Home address: Youngstown, Ohio.

ROLLIN COLFAX STEESE

SECRETARY AND TREASURER,
THE BRIER HILL IRON AND COAL COMPANY

BORN in Akron, Ohio, December 26, 1867, son of Dallas G. and Mary E. (Cassidy) Steese. Educated at the Case School of Applied Science, being a member of the Class of 1891.

On January 1, 1890, Mr. Steese accepted the position of Chemist with the Brier Hill Iron and Coal Co., and has been continuously in the service of that company ever since, being promoted through various grades to the position of Secretary and Treasurer of the company. He was appointed Superintendent of the company on January 1, 1891, and filled this position for over sixteen years. On January 15, 1907, he was elected Secretary of the company and two years later, on January 17, 1909, he was also elected Treasurer and has continued to fill the dual position of Secretary and Treasurer since that time. Also Vice-President of the Brier Hill Coke Company, and the Bessemer Limestone Company; and Director of the First National Bank, The Dollar Savings and Trust Company and The Realty Trust Company.

Business address: Youngstown, O.

Home address: 1344 Fifth Ave., Youngstown, O.

WADE A. TAYLOR

PRESIDENT,

THE DEFOREST SHEET AND TIN PLATE COMPANY

BORN in Loudonville, Ohio, March 26, 1869, son of A. A. and Priscilla P. (Wade) Taylor. Educated in public schools of Loudonville, Ohio, at Greentown Academy, Perrysville, Ohio, and at the University of Wooster.

In 1888, entered employ of J. J. Coon, Grain Brokers, Toledo, Ohio. January, 1890, became bookkeeper for Dolphin Color Works, Toledo, and in April, 1890, removed to Niles, Ohio, and was teller and bookkeeper of First National Bank, becoming later Asst. Cashier and Cashier. In 1895, purchased controlling interest in the bank and managed it until 1901, when he sold his interest and organized The Empire Iron and Steel Co., with a sheet mill at Niles, Ohio. The mill and stock was sold in 1906. In 1909, organized the Deforest Sheet and Tin Plate Co., and built a sheet and tin mill plant at Niles, Ohio, of which he is President. Also President of the Basic Steel Co., The Dollar Savings Bank, and the Sinking Fund and Tax Board, of Niles, Ohio, and Director of the Home Building and Loan Co.

Member of Niles Club, Niles, Ohio; Phi Gamma Delta Club, New York; Phi Gamma Delta Fraternity.

Business address: Niles, Ohio.

Home address: 606 Robbins Avenue, Niles, Ohio.

JONATHAN WARNER

MANUFACTURER

BORN in Mineral Ridge, Ohio, August 2, 1865, son of Jacob and Maria Warner. Educated at the Rayen High School, Youngstown, Ohio and at Williams College, Williamstown, Mass., Class of 1889.

In 1891, became Superintendent of the Russia Sheet Mills, Niles, Ohio. In 1900, owner of the Struthers, Ohio Sheet Mills. From 1900 to 1906, Manager of Sheet Mills for the American Sheet Steel Company and its successor the American Sheet & Tin Plate Company. At present not actively engaged in business. Director of the First National Bank and Dollar Savings & Trust Company of Youngstown, Ohio.

Trustee of Rayen School and Y. M. C. A., Youngstown, Ohio.

Home address: / Youngstown, Ohio.

CHARLES PINCKNEY WHEELER

VICE-PRESIDENT,
PICKANDS, BROWN & COMPANY

BORN at Mount Carroll, Ill., May 5, 1856, son of David H. and Sophia E. (Seymour) Wheeler. Graduate of Northwestern University, A. B., 1876 and later received the degree of A. M. Studied law at the Law School of Columbia University, New York City, 1877-78.

Entered business in 1879. Later became connected with Pickands, Brown and Company, Chicago, Ill., and after serving the company in various capacities was elected Vice-President of the company and has held this position continuously since that time. Also Vice-President and Director of the Zenith Furnace Company, Duluth, Minn., and Federal Furnace Company, Chicago, Ill. Director of the Northwestern Iron Company, Milwaukee and Director of the Rail Joint Company.

Member of the Chicago Club, Mid-Day Club, University Club, Onwentsia Club and Glen View Club, Chicago. Trustee of Northwestern University.

Business address: 115 Adams St., Chicago, Ill.

Home address: 221 Dempster St., Evanston, Ill.

WALTER WOOD

MANAGING PARTNER,
R. D. WOOD & COMPANY

BORN in Philadelphia, Pa., December 6, 1849, son of Richard D. and Julianna (Randolph) Wood. Graduate of Haverford College and Harvard University.

After leaving college, entered the employ of his father's firm, R. D. Wood & Company, and has continued with it ever since, being now the managing partner. The firm controls the Camden Iron Works and the Florence Iron Works. Mr. Wood is President of both. The business consists chiefly of the manufacture of cast iron water and gas pipe for municipal purposes, together with machinery used by such public utilities. The foundation of the business was laid in 1803 by earlier generations of the family. The firm name of R. D. Wood & Co. was adopted in 1847. Mr. Wood is also a Director in a large number of national banks, trust companies, and gas, water and electric companies.

Member of the Board of Managers of Haverford College, and of the Board of Directors of the Philadelphia Chamber of Commerce. Member of several clubs in New York City and Philadelphia. Member of the American Society for Testing Materials and several other engineering societies. For the past few years, his efforts have been directed toward securing uniform international specifications for iron and steel products.

Business address: 400 Chestnut Street, Phila., Pa.

Home address: 1620 Locust St., Phila., Pa.

INDEX



INDEX

The Index comprises a complete list of members. Where no numeral follows the name, the sketch was not received in time for insertion.

| | PAGE | | PAGE |
|-----------------------|------|------------------------|------|
| Adams, E. D..... | 37 | Bush, D. F..... | 59 |
| Ahles, R. L..... | — | Butler, J. G., Jr..... | 60 |
| Andrews, H. E..... | — | Campbell, J. A..... | 13 |
| Andrews, J. I..... | 38 | Campbell, J. J..... | 61 |
| Andrews, M..... | 39 | Carpenter, J. W..... | — |
| Armour, M. C..... | 40 | Carr, C. M..... | 62 |
| Baackes, F..... | 41 | Carse, J. B..... | 63 |
| Bailey, E..... | 12 | Chalfant, H..... | 256 |
| Barren, H. A..... | — | Chamberlain, H. S..... | 64 |
| Bartol, G..... | 42 | Chambers, D. B..... | 244 |
| Battelle, J. G..... | 43 | Chisholm, A. S..... | 65 |
| Bayard, E..... | 44 | Clarke, E. A. S..... | 14 |
| Beale, H. A..... | 254 | Clingerman, W. H..... | 66 |
| Beaumont, G. H..... | — | Cluff, C. C..... | 67 |
| Benner, S. A..... | 45 | Cochran, L. E..... | 68 |
| Bentley, R..... | 46 | Coleman, B. D..... | 256 |
| Billings, F..... | 243 | Cook, E. S..... | 69 |
| Blackburn, W. W..... | 47 | Coolidge, D..... | 70 |
| Blake, M..... | — | Corey, W. E..... | 71 |
| Bolling, R. C..... | — | Coulby, H..... | 72 |
| Booth, C. H..... | 48 | Crane, T. I..... | — |
| Bope, H. P..... | 49 | Crawford, G. G..... | 73 |
| Boynton, C. T..... | 50 | Crawford, W. D..... | 74 |
| Braine, L. F..... | — | Cutler, O. H..... | 75 |
| Bray, T. J..... | 51 | Dalton, H. G..... | — |
| Brinsmade, H. N..... | 52 | Daniels, F. H..... | 76 |
| Brock, J. P..... | — | Davis, S. A..... | 77 |
| Brooke, R. E..... | 53 | Deering, C..... | 78 |
| Brooker, C. F..... | 54 | Dempsey, J. H..... | 79 |
| Brown, F., Jr..... | 55 | Devlin, T..... | 80 |
| Brown, H. H..... | — | Dickson, W. B..... | 81 |
| Brown, L. H..... | 56 | Dinkey, A. C..... | 82 |
| Brown, W. L..... | 57 | Donner, W. H..... | — |
| Buffington, E. J..... | 58 | Downs, G. F..... | — |
| Burden, J. A..... | 255 | Drummond, T. J..... | 15 |
| Burdsall, E..... | — | | |

| | PAGE | | PAGE |
|----------------------------|------|-------------------------|------|
| Du Puy, H..... | 257 | Hatfield, J. A..... | 110 |
| Dwight, E. W..... | 258 | Hayes, G..... | — |
| Dyer, P. S..... | 83 | Hayes, W. L..... | 111 |
| Eavenson, H. N..... | 84 | Heckscher, A..... | 112 |
| Edmonds, R. H..... | 85 | Heckscher, L..... | 113 |
| Elverson, J. S..... | 86 | Heedy, H. W..... | 114 |
| Evans, M..... | 87 | Higgins, H. E..... | — |
| Fackenthal, B. F., Jr..... | 88 | Hildrup, W. T., Jr..... | 115 |
| Farrell, J. A..... | 16 | Hitchcock, F..... | 116 |
| Farrell, W. E..... | 89 | Hobson, R..... | 117 |
| Felton, E. C..... | 17 | Holton, G. E..... | 118 |
| Filbert, W. J..... | — | Horner, W. S..... | 119 |
| Findley, A. I..... | 90 | Howe, H. M..... | 31 |
| Fitzpatrick, F. F..... | 91 | Hoyt, J. H..... | 120 |
| Fleming, H. S..... | 92 | Hubbard, C. R..... | 245 |
| Follansbee, W. U..... | 93 | Huston, A. F..... | 121 |
| Forsyth, R..... | 29 | Hutchinson, O. N..... | 122 |
| Foster, T. J..... | — | Hyman, T. J..... | 123 |
| Fowler, A. A..... | 94 | Inglis, J..... | 124 |
| Francis, L. W..... | 95 | Ireland, R. L..... | 125 |
| Frantz, J. H..... | 96 | Irvin, W. A..... | — |
| Frazer, F..... | 97 | Jarecki, A..... | 246 |
| French, G. W..... | — | Jeffrey, J. W..... | 126 |
| Fritz, J..... | 30 | Jewett, G. W..... | 127 |
| Fuller, J. W., Jr..... | 98 | Johnson, G. H..... | — |
| Garlick, R..... | 259 | Johnston, A..... | 128 |
| Gary, E. H..... | 11 | Johnston, L. M..... | 129 |
| Gayley, J..... | 99 | Jones, B. F., Jr..... | — |
| Gedge, F. C..... | 100 | Jones H. R..... | 130 |
| Gessler, T. A..... | 101 | Jones, J. R..... | 131 |
| Glass, A..... | 102 | Jones, W. L..... | — |
| Grace, E. G..... | 103 | Keefe, J. S..... | 132 |
| Graham, W. T..... | 104 | Kelly, I. A..... | 133 |
| Guthrie, T. W..... | — | Kelley, W. V..... | 134 |
| Hagar, E. M..... | 105 | Kennedy, F. G., Jr..... | — |
| Haines, J. L..... | 106 | Kennedy, H..... | 135 |
| Haldeman, H. L..... | 107 | Kennedy, J..... | 136 |
| Hanna, D. R..... | — | Kennedy, T. W..... | 137 |
| Hart, C..... | 108 | Ker, S. P..... | 138 |
| Harvey, A. F..... | 109 | Kerr, D. G..... | — |
| Haselton, H. S..... | — | King, W. L..... | 18 |

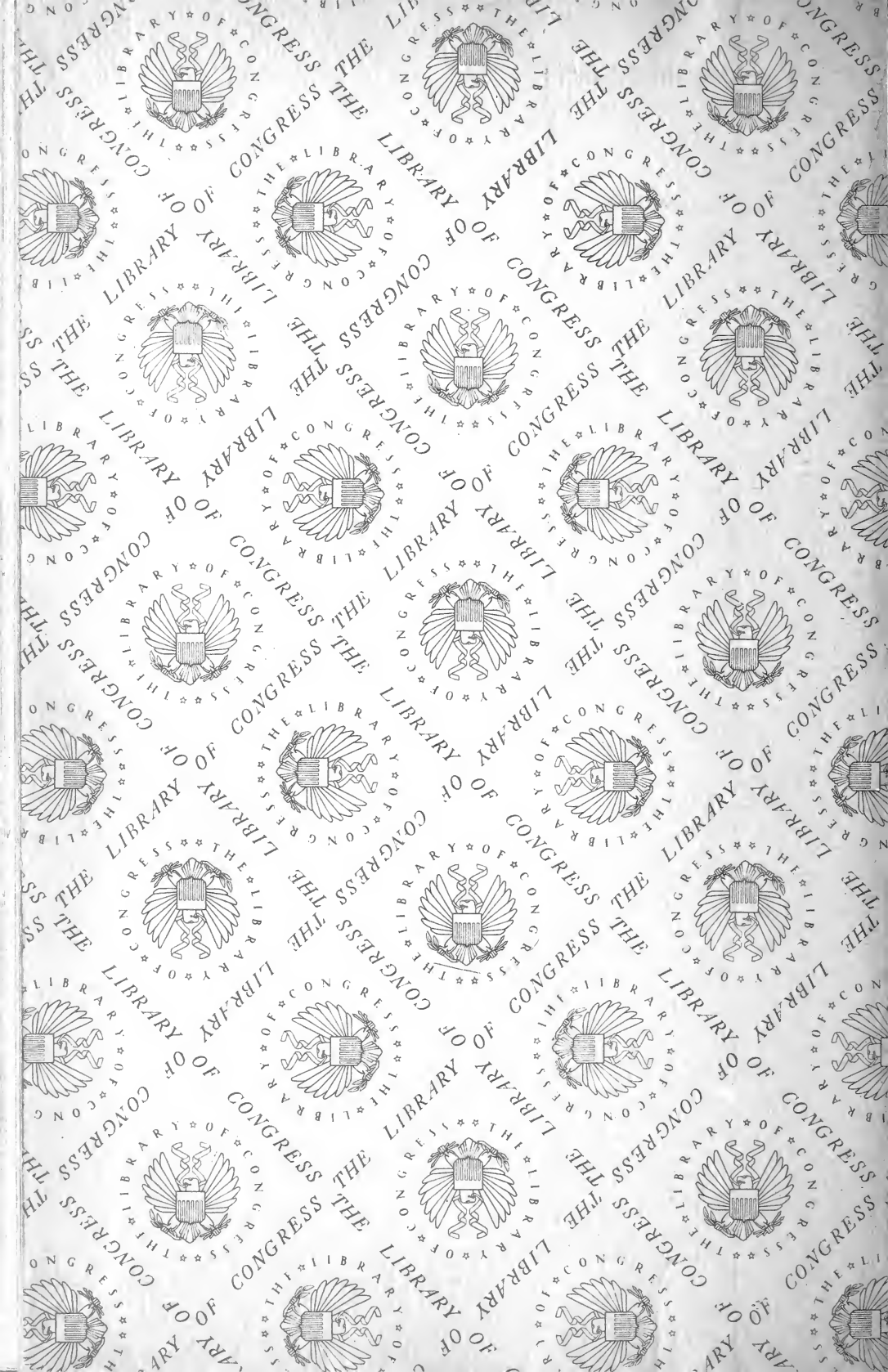
| | PAGE | | PAGE |
|----------------------------|------|------------------------|------|
| Kirchhoff, C. W. H..... | 139 | Moore, V. M..... | 167 |
| Krebs, F..... | 140 | Morgan, J. P..... | 32 |
| Leland, H. M..... | 141 | Morgan, J. P., Jr..... | — |
| Letchworth, O. P..... | 142 | Mudge, E. W..... | 168 |
| Lippincott, J..... | 143 | Newberry, T. H..... | 169 |
| Llewellyn, J. T..... | 144 | Ney, R. W..... | 170 |
| Locke, F. D..... | — | Nicoll, B..... | — |
| Lord, J..... | 145 | Norris, F. E..... | 171 |
| Lynch, T..... | 146 | Oglebay, E. W..... | — |
| Maben, J. C..... | 19 | Ohl, E. N..... | — |
| McCleary, J. T..... | 26 | Ortman, R..... | 172 |
| McClure, S..... | 147 | O'Toole, E..... | 173 |
| McConway, W..... | — | Oursler, J. S..... | — |
| McCormick, C. H..... | 148 | Palmer, W. P..... | 174 |
| McCullough, C. H., Jr..... | 149 | Pargny, E. W..... | 175 |
| McDonald, T..... | 150 | Peckitt, L..... | 176 |
| McFadden, W. H..... | 151 | Penton, J. A..... | 177 |
| McGinley, J..... | 152 | Perkins, G. W..... | 178 |
| McGrath, L. J..... | — | Perkins, H. F..... | 179 |
| McKay, G. F..... | 153 | Perley, W. B..... | — |
| McKillips, C. E..... | 154 | Pessano, A. C..... | 180 |
| McKinney, P..... | — | Pew, J. O..... | 181 |
| McMahon, W. C..... | 155 | Pickands, J. M..... | 249 |
| McMath, F. C..... | 156 | Pilling, W. S..... | 182 |
| McMurray, M..... | 247 | Pope, C. E..... | — |
| McMurtry, G. G..... | — | Preston, V..... | — |
| MacVeagh, C..... | — | Price, C. S..... | 183 |
| Marshall, C. S..... | 157 | Ramsey, C. C..... | — |
| Marshall, W. H..... | — | Rand, C. F..... | 184 |
| Mather, R..... | 158 | Rathbone, C. A..... | 185 |
| Mather, S..... | 20 | Reed, J. H..... | — |
| Mather, W. G..... | 159 | Reeves, D..... | 186 |
| Mathias, T. H..... | 160 | Reis, G. L..... | — |
| Meacham, D. B..... | 161 | Reis, J..... | 187 |
| Meehan, A. F..... | 162 | Repogle, J. L..... | 188 |
| Messler, E. L..... | 260 | Reynders, J. V. W..... | 189 |
| Mesta, G..... | 163 | Richards, F. B..... | 190 |
| Miller, C. L..... | 164 | Roberts, F. C..... | 261 |
| Miller, J. P. K..... | 248 | Robinson, C. R..... | — |
| Mitchell, J..... | 165 | Robinson, C. S..... | 191 |
| Mitchell, R. D..... | 166 | | |

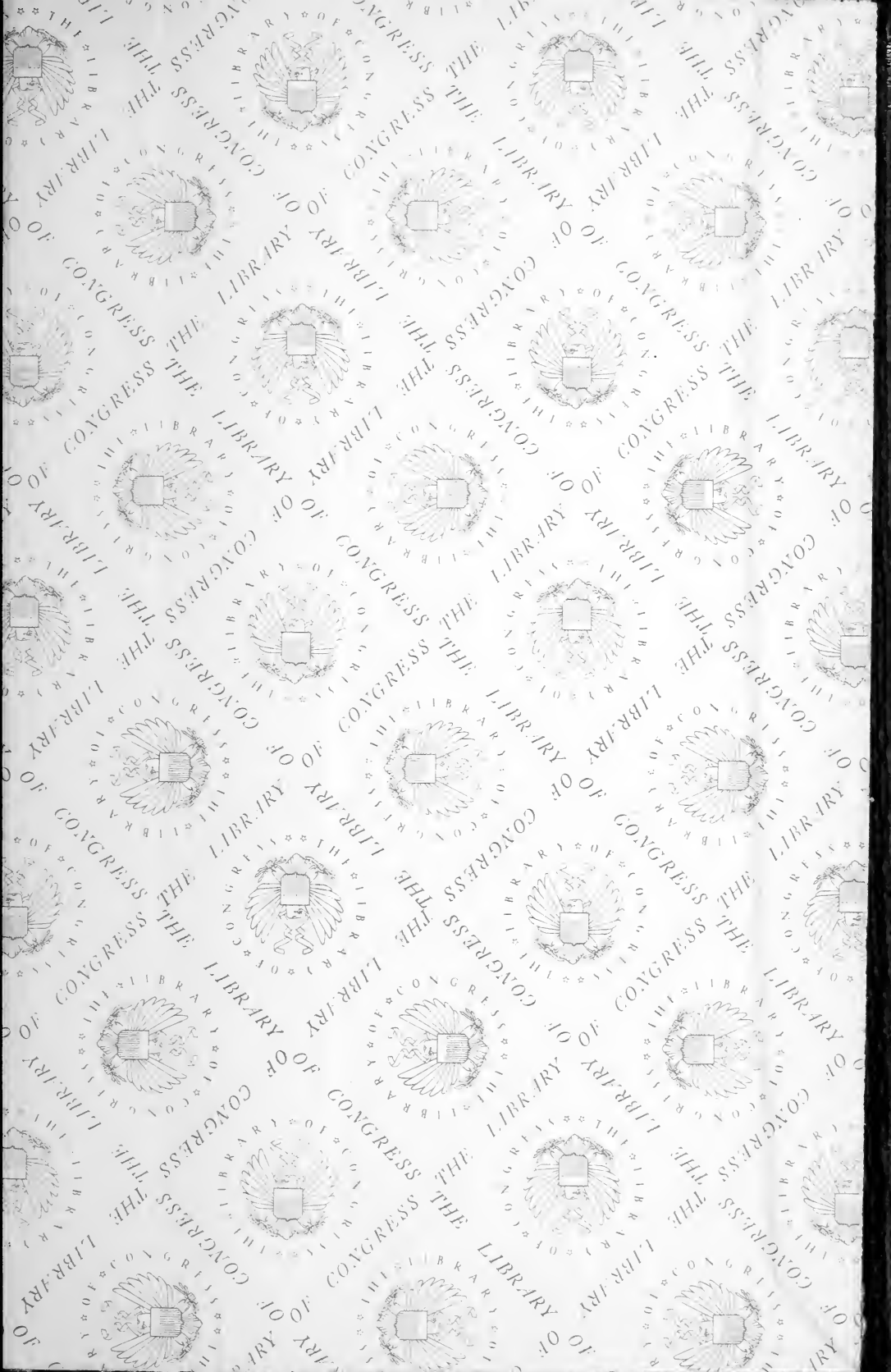
| | PAGE | | PAGE |
|----------------------|------|--------------------------|------|
| Robinson, S. J..... | — | Thomas, E. P..... | 250 |
| Robinson, T. W..... | 192 | Thomas, W. A..... | 218 |
| Roebbling, C. G..... | 193 | Thompson, A..... | 219 |
| Roebbling, F. W..... | 194 | Thomson, T. F..... | 220 |
| Rogers, W. A..... | 21 | Thorp, G. G..... | 221 |
| Root, W. J..... | — | Thropp, J. E..... | 251 |
| Rowe, W. H..... | 195 | Topping, J. A..... | 24 |
| Ruhl, J. L. A..... | 196 | Trimble, R..... | — |
| Runyon, W. C..... | 197 | Verity, G. M..... | 222 |
| Russel, J. R..... | 198 | Wade, J. H..... | 223 |
| Sargent, W. D..... | 199 | Walker, W. R..... | — |
| Schiller, W. B..... | 200 | Wallace, E. C..... | — |
| Schwab, C. M..... | 22 | Wallace, J. C..... | 224 |
| Scott, I. M..... | 201 | Ward, W. L..... | 252 |
| Scully, A. B..... | — | Warner, J..... | 264 |
| Sheadle, J. H..... | 202 | Watrous, R. C..... | 225 |
| Sheldon, S. B..... | 203 | Watts, G. W..... | 226 |
| Shepard, L. A..... | 204 | Weir, E. T..... | 227 |
| Sheridan, R. B..... | 205 | Welborn, J. F..... | 25 |
| Siebert, W. P..... | 206 | Wheeler, A..... | 228 |
| Singer, A. J..... | — | Wheeler, C. P..... | 265 |
| Smink, F. C..... | 207 | Wheeler, H. B..... | 229 |
| Smith, C. C..... | 208 | Whiting, J. H..... | 253 |
| Snow, C. J..... | 209 | Whyte, G. S..... | 230 |
| Snyder, H. S..... | 210 | Wick, G. D..... | 231 |
| Snyder, W. P..... | — | Wick, H. B..... | — |
| Speer, J. T..... | — | Wickersham, G. W..... | 34 |
| Stackhouse, P..... | 23 | Wickwire, T. H..... | 232 |
| Stambaugh, H. H..... | 261 | Wickwire, T. H., Jr..... | 233 |
| Stambaugh, J..... | 211 | Williams, H. D..... | 234 |
| Steese, R. C..... | 262 | Wisener, G. E..... | 235 |
| Stetson, F. L..... | 212 | Witherbee, F. S..... | 236 |
| Stevenson, A. A..... | 213 | Wolle, H. C..... | 237 |
| Stillman, J. S..... | 214 | Wood, F. W..... | 238 |
| Stone, E. E..... | — | Wood, R. G..... | 239 |
| Swank, J. M..... | 33 | Wood, W..... | 266 |
| Taylor, J. M..... | 215 | Worth, E. H..... | — |
| Taylor, M..... | — | Worth, W. P..... | — |
| Taylor, W. A..... | 263 | Zehnder, C. H..... | 240 |
| Taylor, W. H..... | 216 | Zehnder, E. M..... | 241 |
| Thayer, R..... | 217 | Ziesing, A..... | 242 |

B-1970









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